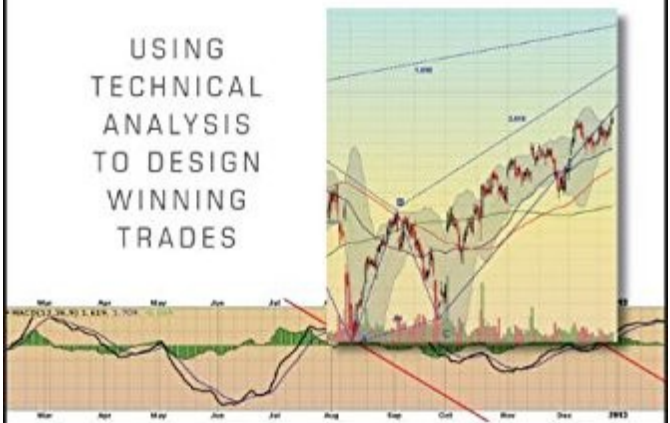
Wiley Trading Series

+ website

TRADING OPTIONS

USING TECHNICAL ANALYSIS TO DESIGN WINNING TRADES



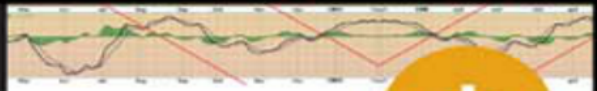
GREG HARMON

Foreword by RALPH ACAMPORA

WILEY

VISIT...

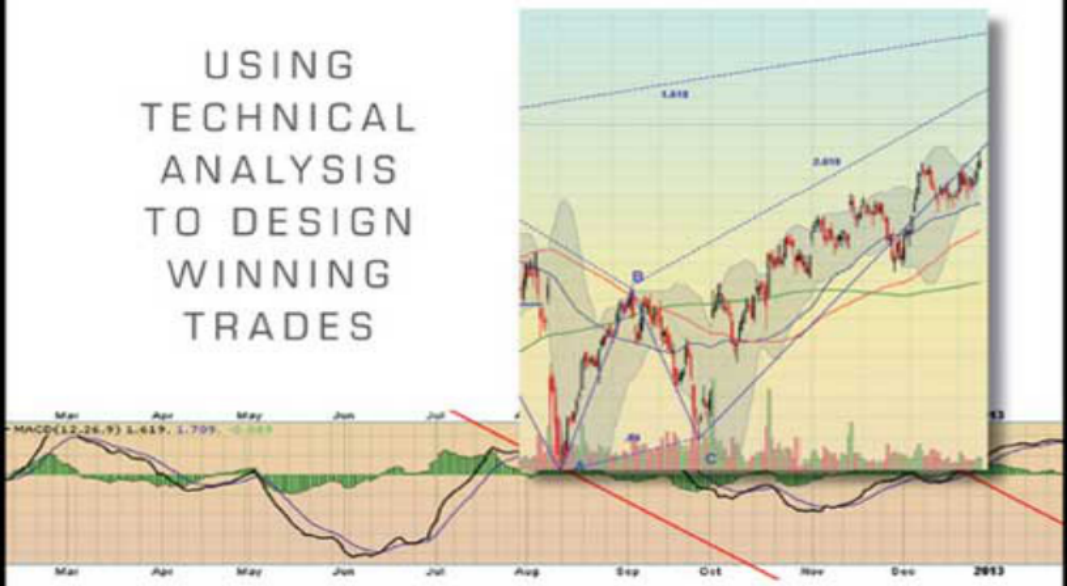
Wiley Trading Series



+ website

TRADING OPTIONS

USING TECHNICAL ANALYSIS TO DESIGN WINNING TRADES



GREG HARMON

Foreword by RALPH ACAMPORA

WILEY

Cover

Half Title

Series Page

Title Page

Copyright Page

Dedication

Foreword

Introduction

Part I: Identifying and Understanding the Trend

Chapter 1: Identifying the Major Trend

Market Influencers and Intermarket Relationships
Significant Market Ratios
Other Indicators
Conclusion

Chapter 2: Sector Review Analysis

Case Study: Sector Ranking
Relative Strength
Conclusion

Part II: Technical Analysis for Identifying Individual Stocks

Chapter 3: Classical Technical Analysis

Support and Resistance
Patterns
Conclusion

Chapter 4: Japanese Candlestick Patterns

Reversal Patterns
Continuation Patterns
Indecision Candles
Conclusion

Chapter 5: Derived and Quantitative Analysis

Fibonacci Analysis
Harmonic Trading
Elliott Wave
Andrews' Pitchfork
Conclusion

Chapter 6: Price Derivatives, Momentum, and Other Indicators

Relative Strength Index (RSI)
Moving Average Convergence/Divergence (MACD) Indicator
Bollinger Bands
Moving Averages
Conclusion

Chapter 7: The Watch List and Initial Plan

Create the Mosaic
Other Information
The Plan
Conclusion

Part III: Options Strategies

Chapter 8: Introduction to Options

Definitions
Expiration and Exercise
Contract Size
Price Terminology
Why Use Options
How Different from Stock
Options Tables
Some Basics Applied
Conclusion

Chapter 9: Options Combinations

Covered Call or Buy Write
Long a Put or Call

Short a Put or Call
Long a Put Spread or Call Spread
Short a Put Spread or Call Spread
Long a Ratio Put or Call Spread
Long or Short a Calendar
Long or Short a Diagonal
Long or Short a Butterfly
Long or Short a Straddle
Long or Short a Strangle
Long or Short an Iron Condor
Long or Short a Risk Reversal
Conclusion

Part IV: Design and Execution

Chapter 10: The Elements of Design

The Elements
Position Sizing and Stop Losses
Conclusion

Chapter 11: Trading Plan

What to Look For
Conclusion

Chapter 12: Execution and Beyond

Execution
Hedging, Profit Taking, and Adjustments
Conclusion

Conclusion

Additional Resources
Books
Websites

About the Companion Website

About the Author

Index

TRADING OPTIONS

Founded in 1807, John Wiley & Sons is the oldest independent publishing company in the United States. With offices in North America, Europe, Australia, and Asia, Wiley is globally committed to developing and marketing print and electronic products and services for our customers' professional and personal knowledge and understanding.

The Wiley Trading series features books by traders who have survived the market's ever changing temperament and have prospered —some by reinventing systems, others by getting back to basics. Whether a novice trader, professional, or somewhere in-between, these books will provide the advice and strategies needed to prosper today and well into the future.

For a list of available titles, visit our website at www.WileyFinance.com.

TRADING OPTIONS

Using Technical Analysis to Design Winning Trades

Greg Harmon

WILEY

Cover image: © Barsoom Design
Cover design: © Barsoom Design

Copyright © 2014 by Greg Harmon. All rights reserved.

Published by John Wiley & Sons, Inc., Hoboken, New Jersey.
Published simultaneously in Canada.

All charts used with permission from TradingView. All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600, or on the Web at www.copyright.com. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at www.wiley.com/go/permissions.

Limit of Liability/Disclaimer of Warranty: While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor author shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

For general information on our other products and services or for technical support, please contact our Customer Care Department within the United States at (800) 762-2974, outside the United States at (317) 572-3993, or fax (317) 572-4002.

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at http://

booksupport.wiley.com. For more information about Wiley products, visit www.wiley.com.

Library of Congress Cataloging-in-Publication Data:
Harmon, Greg.
Trading options : using technical analysis to design winning trades / Greg Harmon.
pages cm. – (Wiley trading series)
Includes index.
ISBN 978-1-118-67913-5 (hardcover); ISBN 978-1-118-67912-8 (ePDF);
ISBN 978-1-118-67917-3 (ePub)
1. Technical analysis (Investment analysis) 2. Investments. 3. Speculation. I. Title.
HG4529.H366 2014
332.64'53–dc23
2013039744

I wish to dedicate this book to my lovely wife, Christine.
Without her love, support and encouragement
it never would have happened. And to our two budding
young technical analysts, Drew and Bronwyn,
ever supportive and always learning.

The subject of this wonderful book is options, and its theme is technical analysis. Greg Harmon deftly describes and teaches us that the commonality in both subjects is price. The laws of supply and demand, or, said another way, the interactions between buyers and sellers, dictate what the trends and the patterns of price will be. Trading Options goes on to meld these trends and patterns into a top-down and bottom-up approach to trading. The macro or top-down view starts with an index and works its way through a sector, intermarket relationships (e.g., fixed income, commodities, etc.), and then to individual stocks. Conversely, the micro or bottom-up approach commences with a single issue and wends its way through intermarket factors, corresponding sectors, and, ending with a market overview, via an index. This is by far the most efficient way to cover the market and identify new optionable ideas.

In price there is knowledge. One trades differently whether in a bullish or in a bearish trend; for example, certain distinct price and volume patterns manifest themselves in a bull market whereas quite often the exact opposite occurs within a bear trend. The early pages of this book help identify these distinctions. The timing of purchases and sales is only part of the task required to be a successful trader; the second and equally important consideration is risk management—when and where to take small losses.

The universality of technical analysis comes alive in this book: Greg emphasizes ratio charts that cover a broad array of topics—for example, emerging markets, U.S. Treasuries, and silver/gold; they instantly expand one's horizons and take the reader around the globe. Nowhere is there a worldwide language as comprehensive and as easily accessible as the charting of prices. This book should be mandatory reading for anyone interested in options and its mutually interdependent subject, technical analysis.

Trading Options also provides the reader with an integrated system

of critical disciplines starting with classical technical analysis with its ability to identify trends and myriad important price patterns. Then it layers on top of this foundation candlestick charting with its unique series of key reversals; indicators like the Relative Strength Index (RSI) are used to create a baseline of future strength and weakness. Last, it gleans areas of potential buyers (support zones) and potential sellers (resistance zones) along with meaningful price objectives by using Fibonacci retracements along with Elliott Wave principles and Harmonics. This carefully laid out technical tapestry is the mosaic that provides readers with the ingredients needed to create their watch lists and plans of action.

Now, the operative word is change. Greg Harmon insists, and rightly so, that positions should be initiated when prices actually break above resistance or below support levels—he refers to this phenomenon as “triggers.” And when triggers occur, you must apply the correct option strategy. Here is where the book once again truly adds value: It explains in-the-money, at-the-money, and out-of-the-money options and how they consist of intrinsic value and time value, along with 13 different combinations of puts and calls. He then combines the concepts of the driver, funding option, and risk limiter into a trading plan. And he finalizes everything with the execution and adjustments for profit taking and hedging.

I wholeheartedly endorse Trading Options because it encourages a set of disciplines that are so important in any kind of trading; for example, it cautions that prejudging triggers can often lead to an incorrect call. Now, that's very sound advice!

—Ralph Acampora

Luck is what happens when preparation meets opportunity.

—Seneca

How did Seneca, nearly 2,000 years ago, have the key to success in nearly every endeavor in the world? We have heard it a thousand times: be prepared and work hard. This is how you give yourself the opportunity to succeed. So often we seek to shortcut this process and get to the prize more quickly. Why do we think this approach can be successful? Malcolm Gladwell has the rule of 10,000 hours. He states that it takes 10,000 hours of preparation to be great at something. So why do you hear people so often attribute their success to luck when it is preparation that is the key? And why do they not spend more time talking about how they went about preparing, so that when luck presented itself they could seize the opportunity? Whether you are preparing for an Olympic competition, to lead a country, to start a new business, or even to do something as mundane as trading stocks and options, these concepts apply.

This book is about process, my process. The process that I repeat every week. The process that I have laid bare on social media over the past four years. The process of trading stocks and options, using technical analysis. It is not glamorous, but a cold, defined process built up over time to be prepared to succeed in trading when the opportunity presents itself. I am a self-proclaimed top-down technician. That means that I start with the macro picture and work my way down to specific ideas. Each week I start with this process at 4:30 Friday afternoon just minutes after the market closes, and drill down from the broad end to the fine detail to be prepared for Monday morning at 9:30 when the market opens. Every week. This book is written in that manner as well. It is written in four parts that act as building blocks, starting with the broad end that can help you be better prepared for any type of trading or investing, and working down to the fine edge that is specific to trading options using

technical tools. There is something for every type of trader and investor here.

I am an old-school technician. I look at charts. I look at a lot of charts. My universe is more than 1,000 stocks, and I look at each one at least once per week. There are many scanning tools and charting packages that can automatically cut the list down and give you just a few names to look at. There is nothing wrong with that style of analysis; it is just not the way I work; it is not old school. I like to look at the price action myself. Many will think it is crazy, but it gives me an edge in several ways. First, it keeps my skills sharp. Second, I have the opportunity to see a nuance that a scanning tool may not pick up and to see the ones that are close but miss the scans. Finally, it gives me the edge to react quickly in a changing market without waiting for the scan to narrow things down for me. This book is written from the old-school perspective, but the concepts are valid no matter how you select your targets for trading. It is worth noting that most of the charts used as illustrations come from the 2011 to 2013 time period. This was a very bullish time in the market, and because of that the illustrations for bullish patterns and reversals are often stronger than for bearish ones. When it is hard to find long-term bearish patterns and reversals, that is a sign of a strong bullish market trend. Also, the time frame matters. This book is written from the perspective of a swing trader or position trader who holds a stock for a few days to a few weeks, but the concepts are equally applied to day trading on the shorter end and investing on the longer end.

Part I gives you the tools to identify the trend and what might change it. This is an important first step. Ninety-nine percent of investors would be better prepared if all they ever read were just these few pages, as most stocks trade in the direction of the prevailing trend. Part II drills down further into the tools to select specific securities. This is where the meat of the technical analysis is found. This is not like what you see on television or you hear from your broker or what you learned in business school. There will be no balance sheet analyses or price-earnings (P/E) ratios or other accounting metrics involved, just price analysis using trading concepts formed over hundreds of years of practitioners. There will be just an interpretation of price action with simple illustrated rules that professional traders use every day, presented in an easy-to-understand way with lots of pictures and examples. Part III starts the exploration of options, but don't worry. There will be no complex discussions of the Greeks (delta, gamma, theta, etc.) or Black-Scholes pricing models, but just simple descriptions of the tools used and how they work, written in plain English. Maybe it will help demystify some of the jargon in the options market. Finally, Part IV puts these all together to

show how to design specific trades, execute them, and make adjustments when necessary.

This book was written to be used as a learning tool and a reference. As you make your way through it, the book gives you knowledge to improve as you go along. It can be read and processed all at once or in pieces with a pause for some time to practice what you are learning. The process described is a lot like peeling an onion. The deeper you go into it and the book, the more detail you will find and the more you will get out of it. You can use this book in many ways, like peeling layers of that onion as well. The first part, on identifying the major trend, has a simple concept as its basis. If you can identify the trend, you know which way 70 percent or more of the stocks in the market are going to move over time. With the ability to determine the trend, you can vastly improve your trading and investment decisions. There are many tools to use to do this, and they are laid out for you to explore. With this ability in hand, you can stop reading and trade or invest using the broad market indexes and be successful. But why stop there? Peeling another layer down to the sector analysis allows you to move beyond the major index exchange-traded funds (ETFs) and into the specific sectors that are driving the trend. Look at it as moving from trading five indexes to adding nine sectors as well. If understanding the price action of the indexes gets you 70 percent of the way there, then this layer gives you another 10 percent. These two pieces should put you light-years ahead of the majority of investors and traders in understanding how the indexes and broad markets operate.

If you continue on to Part II and the chapters on security selection, your understanding goes up another 5 to 10 percent again. Not only will traders use the tools from the first two chapters (Part I) to identify the specific stocks to trade or invest in, but they will also get exposure to a much larger box of tools than in the first two chapters. There are practical examples of traditional technical analysis and pattern recognition as well as an introduction to technical methods like Fibonacci analysis, Harmonics, and Elliott Wave principles. If that is not enough, keep reading to learn about methods using derivatives of price like moving averages, momentum indicators and oscillators, and volatility. All of these tools can then also be applied back to your understanding of the indexes and sectors from earlier, creating a sort of feedback loop to continue to practice the art. This second part also discusses how outside influences like news or high short interest may influence the use of a great trade setup. With the added tools and knowledge, you will now be able to identify individual securities to trade, regardless of whether you go on to learn to use options to create trades.

For traders or investors who are then looking to up their game a notch by using the leverage and risk management characteristics provided by options, the next layer of the onion can give it to them. Part III starts with a straightforward discussion of the basics of options followed by practical applications and descriptions of some more advanced strategies. This part is written for options beginners but has content that many professionals use. The difference is that it is presented in a manner that is easy to understand without a PhD in mathematics or engineering. There are no requirements to calculate theoretical values. In keeping with the technical analysis tradition of observing price, not deriving it, you will use the prices of options in designing trades based on the technical analysis of the stock—not based on the implied volatility, gamma, delta, or any other Greek. Sure, you will get an overview of each, but the nuances of trading options off of implied volatility are for people trading with computer models. You will be looking at pictures. When you have completed the options chapters, you will understand yet another layer of the price action. Even if you are a seasoned options professional, you may see something new in this part, as it is looking at options based on how they fit the technical analysis and not based on their fair value.

The final part will show you how to put it all together into a trading plan complete with proper risk management, including position sizing, hedging, and profit taking for the securities you now know how to identify to trade. You will be able to understand how to look at options and determine the driver in the trade as well as the options that are used to manage risk and finance the trade. For all the value in the first three parts of the book on identifying the trend, selecting the proper securities, and employing the best combination of options to take advantage of the trade setup, this may be the most important part. Without the proper risk management and position sizing, a trade that goes against you can turn from a small hit to your portfolio into a total disaster. If you keep the hits small, that is winning as much as a trade that goes your way. Winning is defined not as being right but instead as not losing everything or so much that you cannot try again the next day. This part has value for at least 95 percent of the traders and investors I have come across. It can be read as a stand-alone part like the previous three but really wraps up the process. After reading this part, you are as far into the onion as is needed to have a good introduction to the process of using technical analysis to develop winning options trades.

This book can be used by everyone. You don't believe me? Even if all you have is a 401(k) that allows you to choose among a stock fund, a bond fund, and cash, it is useful. Identifying the trend in stocks and bonds, using the first chapter, can put you in the right fund at the

right time. Are you allowed to use ETFs? Then moving on to the chapter on sector analysis can help you identify which sector and ETFs to choose that will move with the trend. If your 401(k) allows you to buy individual stocks, then you can use the tools and concepts in Part II to help find specific stocks to hold. If you have a separate brokerage account that allows margin and options, then the third part can help leverage your ideas using proper risk management through options. Fundamental traders can gain an understanding of the proper entry or exit on a short-term or long-term basis to fit their fundamental case or develop strategies to protect gains against the back-and-forth of the market to improve their ideas. The professional technical trader can gain an introduction into how these concepts can be used to develop a trade that uses less cash, has proper risk management, and applies more leverage than just using the stock as a trading instrument. And the options trader can learn how to develop and use options off a technical setup. From novice to expert, there is something for everyone.

As a technical trader, I like pictures. I look at thousands of them every week in the form of stock price charts. There are a lot of price charts and examples of these concepts in this book as you read through it to make it easier to see the concepts in action. The charts in the book are also made available in full color on the book's companion website. You can find information on how to access this website at the back of this book. Don't be scared; pictures trump words. You will start to see these patterns and techniques in the charts in time without the lines drawn. You may also see more technical setups than are discussed with each example. That is good, and it brings up an important point. Technical analysis is as much an art as it is a science when practiced properly. As you learn how to identify levels and prices that are significant, you must keep this in mind. There is no absolute boundary for a price movement. Prices can overshoot and come back or stop just before or just after your targets. Most of the detractors from technical analysis fail to understand this point. If you look at technical analysis as a hard-and-fast set of rules, then you will be wrong most of the time and think that it is a bunch of voodoo or hocus-pocus. Technical analysis shows what could be and where prices have had previous history. That is it. Look at it as creating points of reflection, not points of inflection, and you will do well using technical analysis, whether you are trading indexes, sectors, stocks, or options.

If you want thousands of pages of detailed explanations, you can find them in the additional resources listed at the end of the book. I urge you to seek them out and expand your personal knowledge base. You can never fully learn everything. Also, despite the opening quote

from Seneca and the reference to Malcolm Gladwell, this book is intended to be accessible, written in plain English, and usable by everybody on the planet, not just the experienced trader. Everyone needs to know how to be better prepared to trade and invest so that they can get lucky, too. There are many ways to accomplish this. This is my process. Come on and join me.

IDENTIFYING AND UNDERSTANDING THE TREND

We will get to the options part of the book (trust me), but first there is some groundwork to lay out. Options are derivatives and are based on stock and index prices, so it is first necessary to understand those stock and index prices from a technical perspective before looking for an options trade. The primary goal of technical analysis is to identify the major trend. What does that mean? It simply means knowing the direction of the major market indexes. You hear about the Dow Jones Industrial Average (DJIA) or Dow 30 in the news all the time. This is one of those indexes. The others are the Standard & Poor's (S&P) 500, Russell 2000, and NASDAQ-100. Despite all of the mainstream media attention to the DJIA, traders and investors rely on the other indexes much more as they are broad based and not focused on a narrow set of only 30 companies. The most liquid and heavily traded of these is the S&P 500, and I will focus on that.

These indexes are influenced by many outside factors and markets. It is not enough solely to determine the direction of the major trend. To be prepared to trade, you must also understand what can influence that trend and how. A thorough analysis leaves a trader or investor prepared for anything. Indexes are by definition made up of constituent parts. The S&P 500 is comprised of 500 stocks, the Russell 2000 is made up of 2,000 stocks, and the NASDAQ-100 is a collection of 100 stocks. You could jump right down to the individual pieces in each index to see where they may impact the bigger picture. But analysts group them into nine sectors, which can be reviewed much more quickly to get a head start.

In this part of the book you will learn how to identify the major trend and what influences it. You will then explore the sectors, one

layer deeper into the onion of the market structure, to see where to focus. With this process mastered, you will be ready to make the biggest decision of your investing and trading life: Which way the market is moving, and how you will use that information.

Identifying the Major Trend

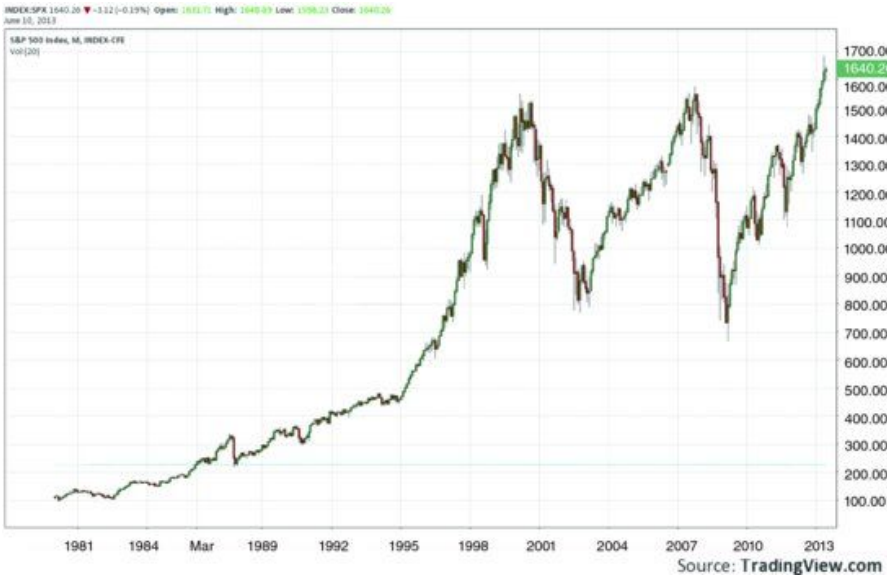
This chapter explores the tools used to determine the major trend in the market and what large-scale outside factors may change it and how. By the end of this chapter you should be able to identify the major trend on a chart and begin to understand how other markets can change that trend.

Why do we need to identify the trend in the first place? If you consider that the four large indexes listed previously hold 2,630 stocks and the vast majority of the market capitalization of the entire market, they are a good approximation for the direction of all stocks. Identifying the trend, then, is like knowing which way the wind is blowing when you are raking leaves or which way the current flows in the river. No matter which individual leaf you are trying to pick up, it will be blown by the same breeze to some extent. It helps to do some of the work with the wind behind you, and it is easier to move your boat downstream than against the current. Trading or investing with the direction of the trend is the same. The trend helps give every stock a tailwind to some extent. That makes sense, right? If the Standard & Poor's (S&P) 500 is going up, then on average all 500 stocks included in the index are also going up. If all of the other indexes are rising as well, then there are, on average, 2,630 stocks that are rising. However, we know in practice that not all stocks move in the direction of the major trend all the time. In fact, the indexes themselves may move against the trend for periods of time without changing the trend. But the definition of the trend is such that if it is determined to be moving higher, then the vast majority of stocks will also be moving higher. At the end of any analysis you want to be choosing stocks or sectors or indexes that are moving with the trend to trade or invest in. Think about it this way. Which has an easier way of life: a dolphin riding the wave or the salmon trying to swim

upstream? Do you want to be the salmon swimming upstream or the dolphin riding the wave? Trading and investing are hard, so try to make it as easy as it can be. And for simplicity I will use the S&P 500 to illustrate all indexes.

When I refer to the trend, I mean the major direction of prices. That is, are prices going up, down, or sideways? It really is that simple. Well, it is easy to write that at least. In practice it is not always so simple. Take a look at the chart in Figure 1.1 of the prices of the S&P 500 from the past 20 years.

FIGURE 1.1 20-Year Monthly S&P 500



Which way is the trend? There are many answers to that question from this picture. From 2009 through 2013 the S&P trend was higher. But in 2008 and 2009 it was down. And from 1997 through to 2013 it was sideways, albeit in a very broad channel. Looking at a tighter picture of weekly prices in Figure 1.2, the upward trend from 2009 to 2013 is noticeable, but you can also see that from April to July 2010 and from July to October 2011 the trend was down, with sideways periods from May until September 2010 and January through July 2011. And if you zoom in further to the daily time frame shown in Figure 1.3, there is a clear upward trend higher from mid-November 2012 until mid-May 2013 but a downtrend from mid-October to mid-November 2012. We could continue to drill down further to the 30-minute, 15-minute, and even 5-minute price charts where each plot represents only 5 minutes of price action. Which gives the right answer?

FIGURE 1.2 2009–2013 Weekly S&P 500

FIGURE 1.3 November 2012 to June 2013 Daily S&P 500

What is clear is that the time frame of your trading or investing matters. Also, the trend can change many times. As an investor holding stocks for weeks or months at a time, it is not necessary to look any closer than the weekly charts. They will give you enough information and filter out the daily noise. A trader holding much shorter-term positions may want to focus on the daily and even shorter charts. How you determine where you focus your analysis should be based on how much time during the day you have to devote to managing your trades, your risk tolerance and return expectations,

and the direction of the trend. If you can spend only 30 minutes a day and are investing for long periods of time, then the weekly time frame is for you. If you are sitting all day staring at your brokerage account with your expendable cash, then maybe you can focus on a shorter time frame. As a swing trader holding positions for a few days up to a couple of weeks on average, I spend my time looking at daily charts and occasionally weekly charts. I will be using daily charts for the rest of this book. Day traders will look at daily charts to identify the trend, but then use shorter 30-minute or even 5-minute charts of price action to determine their entry and exit points.

When you determine your time frame, it is also useful to look at the next larger time frame to see how the trend in your context fits with the next broader view. Price charts are continuous, so the price action at a 30-minute level may give a signal that a change might be about to happen in the daily charts. The opposite might be true as well; a daily chart may be showing a potential for a trend change that does not show up in the weekly chart, for example. Having the perspectives from the different time frames is important.

With the indexes and time frames determined, the next task is to identify the direction of the trend. Let's start by assuming it is obvious and, as in the November 2012 to May 2013 time period, upward. If that is the case, then we can quickly shift to the rest of the world to determine what might change it.

Reading the Chart

All of the charts in this book use Japanese candlesticks. There are other charting methods as well. The price bars shown in Figure 1.4, used in bar charts, are what most people are familiar with if they have been looking at charts. Price bars are read from left to right. The nub sticking out to the left is the opening price of the period, and the nub sticking out to the right is the closing price. Most bar charts are all the same color, solid black, so there is no distinction between an upward price period and a downward price period without a close examination of the nubs. The two ends of the bar designate the range for the day—the high and the low prices.

Japanese candlesticks are very similar but also come with color coding to make them easy to read at a quick glance. The same two periods in a Japanese candlestick chart are shown in Figure 1.5. Notice that the change for the period (the difference between the open and close) is readily identified by the colored (shaded) segment. This is called the real body. It is easy to see at a glance whether the stock moved more or less than the prior day from open to close—that is, whether it had a big range or a little range. However, the full range for the day includes the upper and lower shadows as well. These are the needlelike lines that extend out of the real body. The shadows can also convey information at a glance. The existence of small or no shadows implies that the stock had a strong movement during the day from open to close. The existence of long shadows implies that it had a reversal intraday, retracing from the extreme.

The color of the real body also conveys information quickly on the computer screen. A green candle (or more traditionally a black outline with a hollow interior, making a

white candle) designates a period when the price moved higher, and a red (or lighter) candle designates a period when it moved lower. There are also two special candle colors. If the price closes above the previous candle but the intraday price movement was lower (i.e., it started high and fell but not below the previous close), then the candle is made solid black. This shows at a glance that the stock closed higher than the last period but had downward price action throughout the period. The other is a hollow red candle, which would be printed if the closing price is below the previous close but the intraday price movement was higher.

So with Japanese candlesticks it is easy to see three things at a glance: the open and close range against the full range for the period, whether the price movement was positive or negative, and the relative strength of the period's move.

FIGURE 1.4 Price Bars for Bar Chart

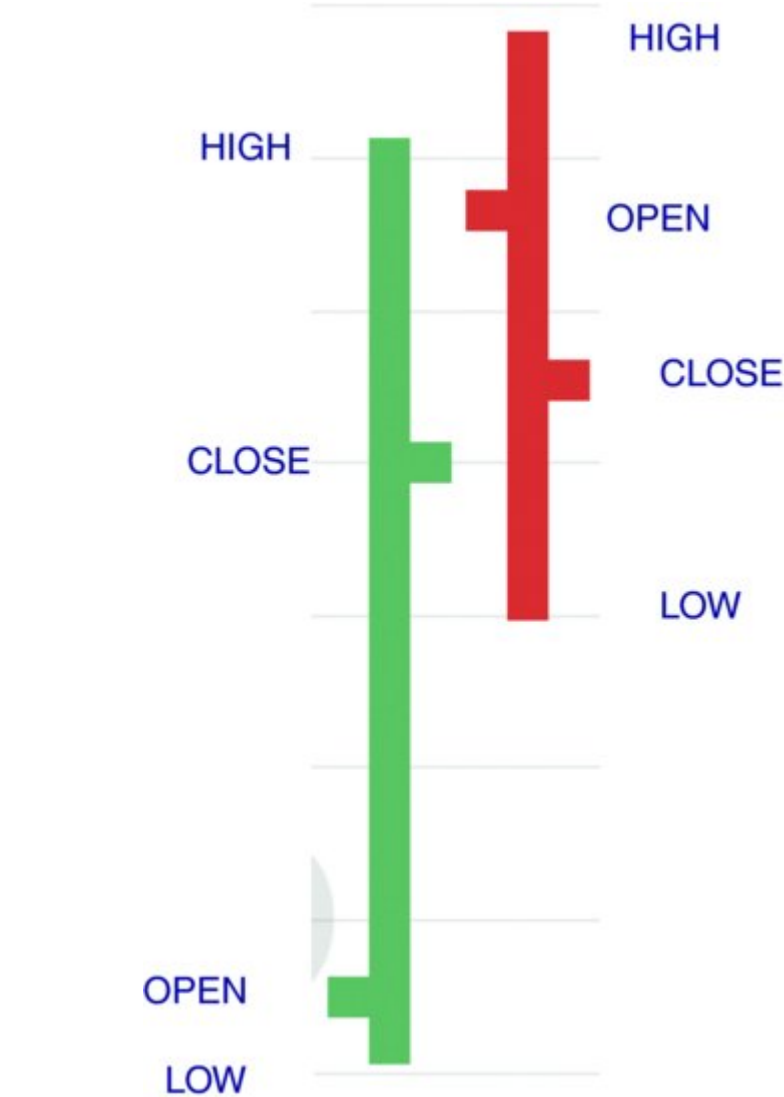
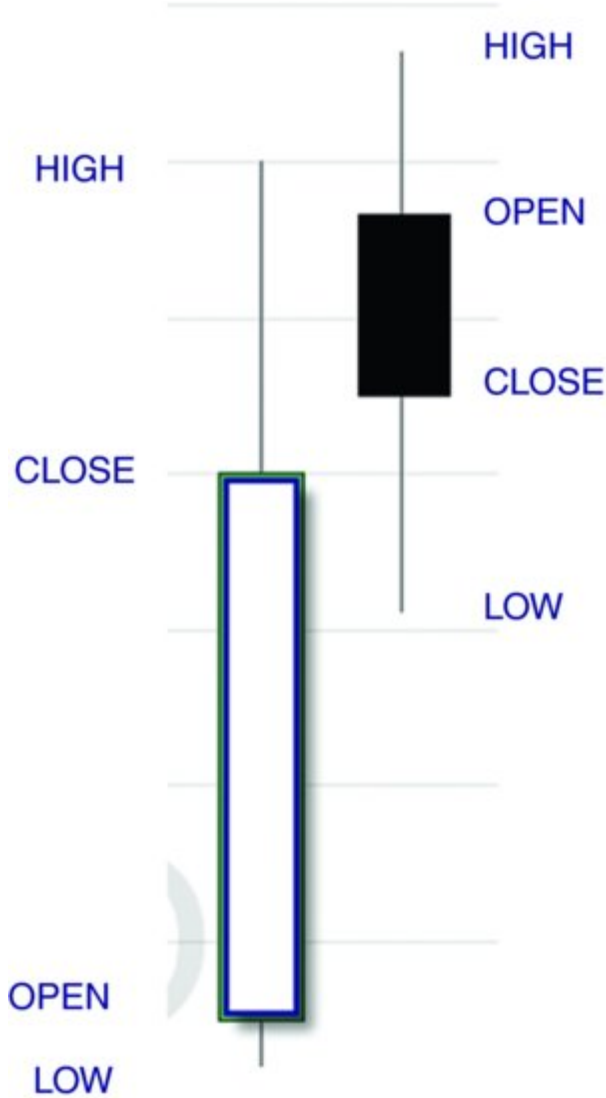


FIGURE 1.5 Japanese Candlesticks



Market Influencers and Intermarket Relationships

Armed with the knowledge that the S&P 500, Russell 2000, and NASDAQ-100 are the most important indexes, it is easy to follow these and collect price data using the ETFs S&P 500 SPDR (ticker: SPY), Russell 2000 iShares (ticker: IWM), and PowerShares QQQ Trust (ticker: QQQ). As mentioned before, it can sometimes be very easy to determine the trend. If the index is rising and has been rising for some time, the trend is higher. If it has been moving sideways for six months, then it is neutral or said to be consolidating; and if it has been falling, then the trend is lower. It does not take a degree in anything to recognize a long trend in one direction. But just because this part is easy does not mean that your work is done. When the trend is easy to determine, it becomes more important to understand those outside forces and markets that affect the trend. These may not always lead or influence the U.S. equity indexes, but they are the ones that can change things quickly if they experience a shock. There are countless examples of markets that have an impact on the U.S. markets, but I like to focus on seven: gold, crude oil, the U.S. Dollar Index, U.S. Treasury bonds, the Shanghai Composite Index, emerging markets, and the Chicago Board Options Exchange Market Volatility Index. I check these on a weekly basis to help discern their potential to move markets. Small movements generally do not have a big impact, so I am looking for the potential for outsized moves that either have happened or may happen. This is done through a direct review of the price action (charts) of each influencer.

Gold is known both as a store of real value and measure of inflation and as a vehicle in which to place wealth during times of uncertainty, like war or other crisis. It is one of the most heavily traded commodities and certainly one of the most controversial. In theory it has no actual intrinsic value, yet it has cast a spell over people for thousands of years. At one point it backed the major currencies of the world, but now it just sits in the form of bars in the vaults of banks deep underground. Some parts of the world find gold more important than others, and some give it almost a religious connotation. It tends to gain in importance during times of political uncertainty or social unrest as a safe haven. It also gains importance in times when paper currency is being debased quickly through inflation. A shock higher in gold has at times led to or confirmed higher equity prices, as it did with the onset of quantitative easing

during the recent financial crisis. Conversely, during times of deflation it may be a signal to the markets and raise the risk of a potential downturn. Examining the chart for gold prices can give clues to changes in its trend that may lead to changes in the broad indexes.

Crude oil is another measure of inflation, as a hard asset. You can use either West Texas Intermediate Crude (WTIC) or Brent to look for an impact. A signal that the price of crude oil is going higher can mean many things. It can be bullish for equity prices if it is not associated with a potential shortage, like from a war, as it shows increased demand for power and thus an expected robust economy. It can also mean rising inflation, so the relationship with gold is important. A falling crude oil price can also be good for the economy and thus stock prices, as it will reduce the cost of gasoline and inputs to consumer products. Following the crude oil chart can often give a heads-up as to what may happen to equities.

The U.S. Dollar Index has long been thought to be inversely correlated with equity markets. As the dollar strengthens, equities usually fall and vice versa. But this is not always the case. The two can trend together for long periods of time, when the dollar is appreciating mainly due to weakening world economies outside of the United States or those economies depreciating their currencies, as is happening in the 2012 to 2013 time frame. The U.S. Dollar Index is heavily weighted toward the euro (over 50 percent) but also has a large allocation to the Japanese yen, British pound, and Canadian dollar. So extreme currency moves in those countries can impact the U.S. Dollar Index and thus U.S. equities.

U.S. Treasuries are also normally inversely correlated with U.S. equities. So a strong move higher in Treasury prices (falling Treasury yields) often leads to falling equity prices. But like the U.S. dollar, Treasury prices can move in the same direction as equity prices for long periods of time. This tends to be true when a shock happens to Treasury prices. From the chart in Figure 1.6 you can see that in general Treasuries and equities moved higher together during the period between 2003 and 2008. But spikes in Treasuries in 2009, 2010, 2012, and 2013 have changed that relationship for periods of time. Also, a major shift in interest rates over a long period of time can vastly impact equity indexes, as it can lead to a reallocation of funds, away from Treasuries and into stocks, or the other way around.

FIGURE 1.6 SPY versus TLT Weekly since 2003

The health of the Chinese market has long been tied to the U.S. market, rightly or wrongly. So it can be useful to look for shocks halfway around the world that could impact markets here at home. With the intertwined trade between the countries, this is easy to understand. A strong Chinese market can signal growth in the country and demand for U.S. commodity consumer products. Weak growth and a weak stock market can drag down the world economy and, if substantial enough, impact equity index prices. Since the bottom in the U.S. market in 2009, the Chinese market has been negatively correlated, with a fall in the Shanghai Composite being positive for U.S. equities.

Perhaps a little less obvious is the relationship between emerging market equities and the U.S. equity market. Strength in emerging markets is seen as a measure of risk taking. This is a positive for U.S. equities, as they are also deemed to be risky assets. U.S. equities can surely go higher without strength in emerging markets. Factors like slow Third World growth or war can impact this relationship. But in general strong emerging markets are positive for U.S. equities. Crises in emerging markets can lead to a drag on the U.S. equity indexes.

The Volatility Index, also known as the Fear Index, can foretell moves in U.S. equities. A big trend higher is generally a negative for equities whereas a low value is like the tailwind we discussed earlier. This index is derived from S&P 500 options pricing, and can range only between 0 and 100. Extremely high values rarely last, whereas extremely low values can persist for years. What is most telling with the Volatility Index is if it starts to change character, moving from a flat to a rising trend or rising to falling. Short-term spikes that remain in a tight range do not usually impact equities for more than a day or

two, despite the fact that they may be big moves in the actual value of the index. Sharp persistent spikes in volatility do have a negative impact on stock prices.

Each of these influencers can be measured either directly or by using exchange-traded funds (ETFs). I prefer the direct measure when looking to see how they may influence the equity trend. The ETFs are good for trading these influencers if you do not trade futures contracts. Rather than a derived value from the direct markets for trading, using the direct measure might give a nuance that an ETF does not see. In the end if they are used to help identify the influence to the equity trend, and not for trading, it does not really matter which you use. Each factor may not have any significant role from week to week. Some may dominate for weeks at a time. Some may seem unimportant for months. It is important to carry this analysis through time to gather a good understanding of which influencers are important and how they change thorough time. It is the mosaic of all of these influencers that is most important. In a time with European economies in recession and the United States and other world powers fighting global deflation, a strong reversal in gold to go higher, for example, would cut across many relationships and might foretell a major change in equities.

These are obviously not the only influencers, and you can pick more. On a monthly basis I also use the German DAX Index, the strongest and most powerful market in Europe; the price of copper, a commodity that is said to have a PhD in economics as it is used worldwide in housing and other areas so can forecast economic growth globally; and natural gas, a fuel of growing importance in the U.S. economy as it replaces coal and takes market share away from crude oil. Bringing in the Japanese market makes sense as it and its currency can play a major role in our markets through how large investors and hedge funds finance their trading activity. The key to any of these influencers is that along with a feel for the direction of the primary trend of the equity indexes, you are watching for externalities that could change that trend quickly. Outside of looking at the price action of each of these influencers directly, many are worth reviewing in ratio charts as well.

Ratio Charts

A ratio chart shows the price of one security valued in terms of the other security. Said another way, take the price of one security and divide it by the price of the second security to get the ratio. The actual value is not usually as important as the technical trend of the ratio. This type of chart is quite useful in uncovering trends between two

assets and when they may change. It can also be useful in debunking myths about perceived relationships between assets. One of these myths is that the Chinese market is highly correlated to U.S. equity markets. There are many so-called expert opinions as to why this is so. Some say it has to do with the use of Chinese labor to manufacture goods for U.S. companies. Others point to the Chinese housing market and its use of raw materials from the United States. Still others reference the size of the population of China and the growth of its middle class as a potential market for U.S. goods. These are all good theories and may hold some merit. But the ratio chart of the China A Shares Index (a broad-based index of Chinese company stocks available only to Chinese investors) to the S&P 500 shown in Figure 1.7 suggests otherwise.

This chart shows a clear downtrending channel continuing from late 2009 through to late 2013. As of this writing, the ratio has retraced 88.6 percent of the entire run-up it saw from 2006 to 2008, the time that built these expert opinions. Nothing continues forever and trends can change on a dime, so making sweeping statements about correlations can be dangerous. But this chart looks to be heading lower toward a full retracement. So what has happened during this time? The U.S. market has recovered from the financial crisis lows to new all-time highs. Yet the ratio chart shows that all during that time the Chinese market has been ceding ground to the U.S. market. Clearly, for a four-year period these markets were not positively correlated but inversely correlated. Armed with that knowledge, it will likely be important when this trend changes. I wonder if at that point the expert opinions will be that these markets are always inversely correlated.

FIGURE 1.7 Ratio Chart—China A Shares versus SPY

Significant Market Ratios

Every trader has additional measures that are used to monitor the health of a trend. For me, aside from seeing a visual of the aforementioned influencers, it is also useful to look at many ratios involving those influencers. The ratio chart can be interpreted as a visualization of the flow of capital from one market to another. It is not a measurable flow like the flow of money into or out of mutual funds, for example, but a flow in terms of relative strength. In that way relative risk measures can be quickly established. Here is a quick rundown of several that I use. Most are a proxy for global market risk appetite in one way or another. The trend is the most important aspect of these charts. The actual level is often not important at all. And even more important than the trend itself is a trend that is starting to change. This is where that portion of the ratio, the potential influencer, needs to be watched most closely for a possible impact to the indexes.

The S&P 500 versus Emerging Markets

The ratio that looks at the flow of funds between the S&P 500 and emerging markets is a very good indicator of the global risk appetite. When the ratio is rising there is relative strength in the S&P 500 compared to emerging markets. A trend like this can occur when emerging markets experience a recession or other shock to their economies. It can also happen when the U.S. economy is perceived to be growing more strongly than those of emerging countries. In this trend, the S&P 500 looks to continue strong. But oddly, even if the flow is favoring emerging markets, this can be good for the U.S. market. Especially deep into a trend, it can show that the appetite for risk is growing, which can signal that the strength in the U.S. market can continue. Trends in both directions can be good for U.S. stocks. This ratio really emphasizes the importance of the change in trend over the trend itself.

U.S. Treasuries versus Junk Bonds

U.S. Treasuries versus high-yield (“junk”) bonds is another measure of risk appetite, but mainly within the U.S. economy. As investors and traders take on more risk, there is a flow into high-yield bonds from U.S. Treasuries. A trend lower in U.S. Treasury prices compared to high-yield bond prices is an indication of acceptance of more risk in the bond market. It is not a direct one-for-one correlation between high-yield bond prices and U.S. equity prices, but high-yield bonds can be a good proxy for equities in terms of the amount of risk taking in the broad marketplace. This is a very good measure of the direction of risk appetite in fixed income securities.

S&P 500 versus U.S. Treasuries

The S&P 500 versus U.S. Treasury securities is another measure of risk appetite within the U.S. marketplace. As discussed earlier, these two markets are usually perceived to be negatively correlated. So a flow from one to the other can indicate either the addition of risk or a flight to safety that may not be as obvious in the individual charts. That is a good short-term view. In the longer term, though, as discussed in the previous section, bond prices and stocks have tended to move in the same direction. This ratio's current trend persisting is a nonevent, but a change is often triggered by some sort of shock and becomes important. If the trend changes, keep watching.

Silver to Gold Ratio

The silver to gold ratio stands as a good proxy for the direction of the S&P 500. From the chart in Figure 1.8 it is easy to see that the correlation between this ratio and the S&P 500 was very strong until the end of 2011. Prior to that, for more than 10 years, the direction of this ratio could be used to identify the direction of the S&P 500. The magnitudes of the moves were not precise, but knowing the direction is 70 percent of the game. Many traders follow it to look for clues, based on this correlation, as to when the S&P 500 might turn before the change shows up in stock prices. Sadly, it looks as if this relationship has run its course, with the correlation flipping 180 degrees in 2012 to an inverse correlation. Again, it was the change that mattered. As the correlation flipped, the S&P 500 started its long uptrend, with gold reversing its 15-year uptrend.

FIGURE 1.8 Silver to Gold Ratio versus S&P 500

Shanghai Composite to S&P 500 Ratio

The ratio of the Shanghai Composite to the S&P 500 is a recent addition. It has shown over the past four years that there is a negative correlation between the two markets (see the “Ratio Charts” sidebar and Figure 1.7). What is bad for Chinese stocks is good for the S&P 500.

This list is not exhaustive, nor is it always useful. But having these additional tools in the shed can help the trader occasionally to clarify a scenario that cannot be seen in the individual charts. Focus on the changes to trends more than the trends themselves in terms of what can impact the equity indexes.

Other Indicators

There are many other time-tested indicators that professionals have used for years as well.

Sentiment

The put/call ratio is one to measure bullish or bearish sentiment. The higher the ratio, the higher the bullish sentiment is thought to be. There are also many investor surveys that measure sentiment, like the American Association of Individual Investors (AAII) Sentiment Survey. I also use some breadth measures, like the percentage of stocks that are over their 200-day simple moving average (SMA). You do not need to use any or all of these. The point is to get comfortable with a set of indicators that do not all derive from the same market that you are trying to learn about.

Sentiment can play a large role in the markets, and many traders base their decisions entirely on sentiment. The area of behavioral economics is attempting to add perspective in this area.

Trend Tools

There are a couple of trend tools that I find particularly useful: Andrews' Pitchfork and Renko charts. These two types of charts do not give targets but can be very helpful in determining the trend.

Andrews' Pitchfork is named for Dr. Alan Andrews, who developed it. It is very simple in its interpretation. The chart of the S&P 500 in Figure 1.9 displays a pitchfork active in the S&P 500 SPDR as I am writing this book. From the uptrend that began in June 2012, there is a pullback that defines three parallel lines, like the tines of a pitchfork. These are called the upper median, median, and lower median lines—not very creative, but descriptive. There are also two midlines in this chart that show the midpoints between the three main lines. The thesis is that the three major lines attract the stock price and there may be a struggle at the midline between them. This chart is a great advocate for their use, as the price has been tightly tied to the median line and has snapped back after wandering away every time for the six months shown. This can be an easy way to see the trend. There are more complicated measures and indicators that can be applied to Andrews' Pitchforks that can give a buy or sell signal, which we will touch on later. For now, just notice the simplicity of the tool in showing which way the trend is heading.

FIGURE 1.9 SPY—Andrews' Pitchfork

Renko charts can be just as simple. Shown in Figure 1.10 in green (or white) and red (or black) bricks, there is no room for interpretation here. Up means buy and down means sell. If it is green it is a buy signal. If it is red it is a sell signal. There are mostly green bricks in this trend, so it is bullish. How easy is that? These charts are derived from Japanese candlestick charts, which we will discuss in more depth later with the individual charts.

FIGURE 1.10 SPY—Renko Chart

Momentum and Other Indicators

As stated earlier, sometimes it is easy to see the trend. Other times it is not so clear. When it is less clear, there are many tools that have been developed that can help. Some of these are momentum based, others volatility based, and still others can be based on historical price data directly. Let's take a look at a few of these. There will be more detail later in the book.

Simple moving averages (SMAs) are one of the most frequently used indicators. A 50-day SMA is nothing more than the average of the price of the index over the prior 50 trading days. Traders use all sorts of SMAs, including the 9-, 13-, 20-, 50-, 100-, 150-, and 200-day SMAs. For simple trend analysis, there are only two things to look for in the SMA: whether the index is above or below the SMA, and the direction in which they are both heading. In the simplest terms, if the index is above the 50-day SMA, that is bullish, and the bias is for it to continue higher. If it is below the SMA, that is the opposite. If the SMA is rising, that also supports a rising trend, and a falling SMA emphasizes a falling trend. The chart in Figure 1.11 shows the S&P 500 with its 50-day SMA (dark line) since January 2012. There are three distinct periods when the index was above the 50-day SMA, and in each period the trend was rising. Also notice that the two periods when the index crossed below the 50-day SMA the trend changed for a period of time until it crossed back above.

FIGURE 1.11 SPY since January 2012

Using the same chart, the Bollinger bands (the channel above and below the index price) can be used to find a trend. They use the standard 20-day SMA as the midline and two standard deviations to each side for the envelope. When the channel is rising, the trend is up; and when it is falling, the trend is down. Traders use these for other nuances, which we will discuss later in the book as well. At the top of the chart, the Relative Strength Index (RSI) is a measure of the strength of the trend, a momentum oscillator. On a scale of 0 to 100 it is deemed to indicate a bullish (higher) trend over 50 and a bearish (lower) trend under 50. Many traders expand this for stronger confirmation to look for measures over 60 or under 40. When the RSI is over 70, the index is considered overbought, and under 30 it is considered oversold.

Finally, at the bottom of the chart, the moving average convergence/divergence (MACD) indicator is a measure of momentum strength. In simple terms, when the choppier (blue) signal line is rising, the trend is higher; and when it is falling, it is lower. A trend change occurs when the signal line crosses up or down. The (red or black) histogram can be viewed the same way. When it is growing and positive, the trend is higher; and when it is falling and negative, the trend is lower.

Each of these indicators can be customized by traders to try to gain an edge. Like the 9-, 13-, 20-, 50-, 100-, 150-, and 200-day SMAs, I have also seen 144 and 250 days used. Traders will convert them to

exponential moving averages (EMAs), giving more weight to the recent activity than the distant past, whereas the SMAs are equally weighted. The Bollinger bands (a measure of volatility) can be replaced with moving average envelopes, Average True Range (ATR), or other volatility measures. They can also be adjusted to use other than the standard 20-day SMA as the midline and two standard deviations to each side for the envelope. The RSI, which uses a 14-day moving average on a closing basis on the chart, can use any other moving average; I see many day traders use two days. And the MACD, which uses two different exponential moving averages, can also be customized to suit the trader, or any number of other momentum oscillators can substitute for the MACD.

I am not advocating any particular combination here for help in determining the trend, but will make three points. First, keep it pretty simple. One SMA, one oscillator, and one other indicator are enough. I have seen traders' charts with 15 indicators on them and cannot understand how they can ever make a decision with that much information. The indicators will all turn at slightly different times. Play around with them if you like to find the ones that suit you best, but do keep it simple. Second, many charting packages come preprogrammed for RSI, MACD, and other indicators. For use in determining the trend, it is not necessary to change these factory-installed settings at all. You will likely have the same settings as 95 percent of users and may think that will not give you an edge. But it is much more efficient just to leave them alone if you are using them only for trend identification. Unless you have some kind of quantitative system that has been tested and proven to work, you are likely just spitting into the wind trying to customize these tools for this exercise. Finally, remember that these indicators are derived from price action. The primary source of trend identification should be from examining price. Try looking at the chart with nothing but the price action first to determine the trend. Then add the indicators. These indicators may confirm that action or show divergences that may lead to a change in trend, but the emphasis is on may. Price should always be the first determinant of the trend.

Conclusion

You should now be pretty well initiated into the process of trend identification. You should be able to identify the trend as either rising, consolidating, or falling over the proper time frame. You should also be able to identify which, if any, other markets may influence that trend and change its direction. Finally, you should be able to use other indicators such as sentiment, trend tools like Andrews' Pitchfork and Renko charts, momentum, and other tools like SMAs, RSI, Bollinger bands, and MACD to help identify the trend when it may be choppy or hard to determine.

You have seen that there can be many variations on the multitude of indicators used, which can create an infinite number of potential tools to use to follow and determine the trend. Do not get sucked into the complexity. If you can see that the price is moving from the lower left of the chart to the upper right, then that may be all that you need. It can be that obvious.

To determine what could impact that trend, again look at the price action. It is better to look at the price action of a few key markets week in and week out to create a montage of the global marketplace than to try to create precision in any particular indicator. There will be few outside influences that give an edge in determining a trend change. Most will continue along the same path that they have been on without impacting the equity indexes.

Look specifically for changes in trends of those markets that can influence the equity indexes to heighten your awareness of a potential impact on the equity market. Even then they still may not make an impact. It is the shocks to the system that sometimes show up early in other markets that matter in terms of a change of trend, not a continuing trend.

When adding other indicators, again keep it simple. Putting two or more momentum indicators and four oscillators will not do much to improve your ability to identify the trend and may even inhibit that ability.

In Chapter 2, we delve into the next layer of the onion, sector analysis, to see how to refine the process.

Sector Review Analysis

In this chapter we look at market sectors using many of the same tools that we used to identify the primary trend. We will also introduce the concept of relative strength as an additional tool, a concept that is different from the Relative Strength Index (RSI) discussed previously in Chapter 1. By the end of the chapter you should be armed with the skills to further refine the process of looking for good trading setups by identifying the strongest and weakest sectors in terms of their alignment with the trend. Through a combination of relative strength and trend analysis, it is possible to rank the sectors in terms of their short-term strength.

With the trend in the indexes determined, you can move directly to looking for stocks that have a good trading setup within that trend. This next step helps in narrowing the search, but it is not a requirement. It can be a major time-saver for the trader who is time constrained or an essential tool for the trader who is trading indexes and sectors. The process peels the onion one more level to look at the stock sector indexes, to see where there is strength and where there is weakness. By reviewing the charts of the market sectors, you can often accomplish this quickly. I use the Select Sector SPDR series, but there are other choices as well. The nine sectors (Basic Materials, Energy, Financials, Industrials, Technology, Consumer Staples, Utilities, Healthcare, and Consumer Discretionary) make up the entire universe. There are always a few sectors that lead and a few that lag. By finding those laggard sectors and tossing them aside and then drilling down into only the stocks in the leading sectors, you can cut out a review of several hundred charts in a 1,000-stock universe. But there is a side benefit from this analysis as well. Sector rotation in stocks is a real thing. You will get to understand this through trend analysis of sectors. Defensive sectors like Utilities and Healthcare rarely trade in

the same trending direction as Energy and Financials, for example. When an index looks to be stronger in one direction but the leading sectors are getting extended or tired, this can be a sign of sector rotation and new leaders emerging.

Moving through each sector chart, start with the same process as we just ran through for the indexes in Chapter 1. Look for a price trend first. If it is obvious, that is great. If that trend is also following the trend of the index, it is even better. If there is not an easily discernible trend, then use the tools previously mentioned. The same simple moving averages (SMAs), RSIs, and moving average convergence/divergence (MACD) indicators can be applied here, too. Don't forget to pull out to a longer time frame as well to see how that trend may change. Finding that four sectors are moving with the index is great. But if one of them is looking tired on a longer time frame and the other three are still strong, then you can narrow your focus further. The same goes for those sectors that are lagging. If on a longer time frame one or two look to be getting stronger or turning up, then you have already saved yourself some time for the next week. I like to print a chart of each sector and then rank them from best to worst. My wife and kids see me spreading them out on the bed Saturday morning and moving them around like a jigsaw puzzle. That is me, but remember I am old school and maybe a little quirky.

Case Study: Sector Ranking

In this section the nine Select Sector SPDR charts are ranked from strongest to weakest against a SPDR S&P 500 that is in an uptrend. This can get very complicated, but I like to make it very simple. I start by printing out all nine charts using just a few indicators: price, the 50-day SMA, Bollinger bands, RSI, and MACD. I like to be able to physically move them around. In fact, I lay them all out on the bed. My wife loves this part of the weekend. (You can just open them in different windows on your computer screen.) From that point I sort them into three piles: one for strong charts, one for weak charts, and then the last one for "other." Sometimes the "other" pile becomes two piles, one more tied to the strong and one more tied to the weak.

How does this work? Let's start with the charts labeled A-1 through A-3. The Technology Select Sector SPDR (ticker: XLK), Materials Select Sector SPDR (XLB), and Industrials Select Sector SPDR (XLI) make up the strongest group A. (See Figures 2.1 to 2.3.)

FIGURE 2.1 Technology Select Sector SPDR (XLK)

FIGURE 2.2 Materials Select Sector SPDR (XLB)

FIGURE 2.3 Industrials Select Sector SPDR (XLI)

Following them are the Energy Select Sector SPDR (XLE), Healthcare Select Sector SPDR (XLV), Consumer Discretionary Select Sector SPDR (XLY), and Financials Select Sector SPDR (XLF) shown in Figures 2.4 to 2.7. These are the "Other" pile (group B). They are neither the strongest nor the weakest sectors.

FIGURE 2.4 Energy Select Sector SPDR (XLE)

FIGURE 2.5 Healthcare Select Sector SPDR (XLV)

FIGURE 2.6 Consumer Discretionary Select Sector SPDR (XLY)

FIGURE 2.7 Financials Select Sector SPDR (XLF)

The last group, the weakest sectors (group C), consists of the Utilities Select Sector SPDR (XLU) and Consumer Staples Select Sector SPDR (XLP). (See Figures 2.8 and 2.9.)

FIGURE 2.8 Utilities Select Sector SPDR (XLU)

FIGURE 2.9 Consumer Staples Select Sector SPDR (XLP)

Can you see the nuances among the three groups? All of the stocks in the strong group A have five things in common. First, they are in an uptrend. They may be pulling back but have not made new lower lows. Next, they are all above their 50-day SMAs. Third, they all have an RSI that is above the midline. Next, they are not pressing their respective Bollinger bands. Finally, their MACDs are flat but not yet

rolling lower.

Notice how these factors change when looking at the group B sectors. All are testing support at the 50-day SMA or have just broken through it. The price is making a lower low. The RSIs are through the midline with MACDs that are declining on the signal line. And they are all pushing the lower Bollinger band lower.

Moving to the group C sectors, it gets even worse. These sectors have moved well through their 50-day SMAs. They have RSIs that are close to testing support at technically oversold levels. Their MACDs are falling and their prices are falling in longer (red or black) candles. Finally, they have blown the lower Bollinger band out to the downside, and price has moved outside of it. You can add all sorts of other indicators, but this simple way of looking at the sectors all at once makes it easy visually to separate winners from laggards.

Once that is done, you can focus on finding stocks in the leading sectors. In this case you would focus on Technology, Basic Materials, and Industrials. But the analysis can be refined by ranking the sectors within each group. This is the number associated with the letter on each chart. This is very subjective, but I have ranked the Technology sector #1 for its relatively high price compared to the previous low, and the distance from the 50-day SMA and the lower Bollinger band. The Materials sector is at the middle of the Bollinger bands and at the 20-day SMA as well, but was pushed to #2 due to the RSI rolling lower. The Industrials sector comes in #3, as price is closest to the Bollinger band, nearly at a new low, and the chart has the weakest-looking MACD.

Repeating this for the group B sectors shows both the Energy sector and the Healthcare sector at the 50-day SMA, while the Consumer Discretionary and Financials sectors have pushed below it. This gives the edge to Energy and Healthcare; Energy has a slightly stronger RSI, with the other factors being similar, so it gets #4 and then #5 goes to Healthcare. The Consumer Discretionary and Financials sectors have similar characteristics all around so they end up tied at #6.

Finally, moving on to the group C sectors, they both look ugly. The Consumer Staples sector might be a bit uglier with the extent of the price move, but the two are not different enough to separate them in my opinion, so they both come in at #8.

The final ranking: Technology, Basic Materials, Industrials, Energy, Healthcare, Consumer Discretionary, Financials, Utilities, and Consumer Staples. Sometimes you can also get signals from this type of analysis. With Technology leading and Consumer Staples and Utilities lagging, this confirms a strong market, for example. Defensive sectors are lagging and innovative sectors are leading.

Relative Strength

Another useful tool for this part of the process is measuring relative strength. This is a direct measure of the strength of the sector against the index, and is different from the Relative Strength Index (RSI) discussed previously in Chapter 1. By plotting the returns of each sector against the returns of the index, you can see which sectors are outperforming and which are underperforming. The chart in Figure 2.10 shows the returns of several sectors plotted with the returns of the S&P 500 SPDR from October 2012 until June 2013. It is easy to see that the move higher in the S&P was helped by the outperformance of the Financials Select Sector SPDR (XLF) and Healthcare Select Sector SPDR (XLV) despite the drag from the underperforming Energy Select Sector SPDR (XLE) and Utilities Select Sector SPDR (XLU). If you do not have time to look at the nine graphs from each sector to identify the strong and weak sectors, you can certainly find a few seconds to review one chart with several of them on it.

FIGURE 2.10 Relative Strength—Broad Scale

Time scale matters in this regard. If you are conducting a weekly search for the strongest and weakest sectors to trade that week, then the nine-month chart of weekly plots of performance will not be relevant. Using a one-month chart of daily or even hourly

performance would be more suited to this analysis, and will give very different results. The same sectors on a one-month scale in Figure 2.11 show that only the Financials sector outperformed the S&P 500 over a shorter one-month period.

FIGURE 2.11 Relative Strength—Short Scale

Conclusion

You now have two easy visual methods for determining which sectors are likely to continue to drive the trend in the major indexes. Neither is essential to finding the ultimate individual stocks that you will trade, but both allow for a shortcutting of the process with very little effort—a highly efficient and effective shortcut to your process. What can beat that? These new tools to refine the search while moving forward into selecting individual stocks can save hours of chart review. It is not a substitute for looking at every chart, but narrowing the search to those sectors that are driving the trend will catch the vast majority of the tradable setups. There will always be others that have some element that moves them against other tends. You will never find every setup or be able to trade all those that you find. But it should be comforting to know that the ones you do find now will be aligned with the trend and in the sectors that are supporting and driving that trend, whether it be up or down.

With the process complete, you now have a solid understanding of the direction of the trend and what sectors are driving it. You have an understanding of what might change the trend and how the leading sectors may change in the short run. Not bad for a few hours of work! With that alone you would be prepared well beyond most people who are trying to trade their own money, whether it is a 401(k), inheritance, or the result of years of toil. This is just scratching the surface, but it is also enough for a solid foundation to move on to single-stock technical analysis. You can spend thousands of hours and pages of reading delving further into this type of analysis, and I urge you do so, especially if you trade index futures or exchange-traded funds (ETFs) on indexes. The list of additional reading resources at the back of the book is a great place to start.

You also did not look at any fundamentals of the market in this part or read about the death of the euro, how the latest election will change the markets, the debt crisis, or war in the Middle East. I also urge you to stop reading the newspapers and watching television to get your news about the markets. There is interesting information there and it can help make you a more rounded person, but it will not help you trade on Monday.

In the next part we will delve into the technical analysis of individual stocks to determine which ones we will design trades around. There will be many more tools introduced and practical examples to move one layer deeper into the onion. I promise you we will get to options, but take a moment to congratulate yourself first for getting through the first part, on identifying and understanding the trend.

Technical Analysis for Identifying Individual Stocks

The trend is identified, the potential catalysts for change have been reviewed, and now it is time to trade options, right? Not so fast. All you know right now in the process is the trend. This is akin to knowing which way the wind is blowing. Now it is time to dig deeper and look for opportunities where maybe the wind is blowing faster or where something got caught on a branch and is about to be released and catch up. But enough of the metaphors; let's start to analyze that universe of stocks. Put away your copy of Graham and Dodd's Security Analysis. While interesting, valuation has little or no bearing on trading. There will be no accounting ratios, no price-earnings (P/E) multiples, and no competitive industry analysis, just price action in its many forms. You could get out a calculator, but relax. There will be no compound annual growth rate (CAGR) or discounted cash flow (DCF) analysis, just simple adding, subtracting, multiplying, and dividing.

In Part I we made the assumption that it is easy to find the trend and, if not, that a few simple tools—the Relative Strength Index (RSI), moving average convergence/divergence (MACD) indicator, and simple moving averages (SMAs)—could help. If you follow the trend, then buying and selling stocks that move with it can be enough to make money. When the trend changes or when your stop loss is hit, you sell and that is the end. This is a very simple approach. But there are also many instances where a stock displays price history that has led to the expected future price action. As options traders, there are additional dimensions to our trades, one of which is time. Understanding how a stock price might react and roughly how long it may take can make or break an options trade. Our goal is to find

stocks that have a potential to move 5 to 10 percent or more in a very short time period. So before we delve into options, let's explore many of these tools of technical analysis that will be useful in designing those trades, and apply them to individual stock charts. At this point, I break from the process outlined in Part I and bring back into the analysis every stock in my universe, not just those in leading sectors. We will start with the basics and end with some more complex patterns.

Recall that technical analysis is as much an art as it is a science. As you learn how to identify levels and prices that are significant you must keep this in mind. There is no absolute boundary for a price movement. Prices can overshoot and come back or stop just before or just after your targets. It is best to think of your targets as a range or a really wide, blurry line, or else you will get totally frustrated. Also, technical analysis does not always work. Yes, I said it. That is the way it goes with both technical analysis and fundamental analysis. Technical analysis at its base is an interpretation of price action, plain and simple. It can be interpreted in many ways, many of which we will review next. But no matter what tools they use, all technicians are looking for an edge to give a good entry or exit on a risk/reward basis for a deployment of capital. It can be a risk framework to design a trading strategy around. It is sometimes a forecast. It is a possible future with contingencies. This is a subtlety that many who do not practice technical analysis fail to grasp. There is nothing about certainty in any of those statements. Technical analysis is not a road map. It does not point to an outcome. Probability is more like it. It is not fixed in time, either. The technical read can change with changes in the price action, expected or unexpected. Nothing is certain. It can change with time.

In this part we will delve in to four types of technical analysis. The first area to explore in Chapter 3 is classical technical analysis, the study of support and resistance, and of patterns. We will then move into the world of Japanese candlestick formations in Chapter 4. Next follows the methods based on rhythmic flows like Fibonacci retracements, Harmonic patterns, Elliott Wave principles, Andrews' Pitchfork, and more in Chapter 5. In Chapter 6 we deal with technical tools based on price derivations like momentum oscillators and moving averages, as well as volatility-based analysis. Each of these methods of technical analysis has had many books and thousands of pages written about it. We will not be delving into much of the theory behind them but rather the practical application of the principles to find stocks that are ready to move. I find the derivation and history as fascinating as the practical application, but they are not for this text. Consult the Additional Resources section at the back of the book for

further insights and history.

With these sets of tools in your belt, we will then learn to create the trading watch list and start on the trading plan in Chapter 7. Here we will look at how news and other events can influence a stock and your decision to trade it or avoid it. At the end of Part II you should be able to study charts using these multiple methods to create a mosaic of the stock and determine its viability to be traded. Then script a plan to execute using that stock.

Classical Technical Analysis

In this chapter, we explore methods used in classical Western technical analysis, popularized through the texts of Edwards and Magee and others. This includes support and resistance as well as patterns that emerge through the push and pull between supply and demand. By the end of this chapter, you should be able to identify stocks that are potential trading vehicles using these techniques and be ready to explore additional techniques. The closest thing to certainty in the technical analysis world is a horizontal support or resistance line. They do not change, but they are also not made of concrete. Price can just as easily blow right through them or gap over them as it can be halted by these lines. And what has worked in the past may or may not work in the future. With that in mind, let's start the journey there.

Support and Resistance

The simplest technical indicator to look for is horizontal support and resistance, as shown in Figure 3.1. These lines show up in every stock at different points in time. They are called support and resistance because they seem to provide a floor and a ceiling to the price movement in the stock. The chart for DSW Inc. shows both horizontal resistance and horizontal support in the first half of 2013. The upper horizontal line in the chart marks the resistance at 69.50. This can be viewed as buyers and sellers at a crossroads. The buyers were seeing a reason to add to their holdings, but the sellers were taking profits and matching them at this level. This led to the price advancement halting at the 69.50 level three times between January and April before the sellers won out and the stock price fell from the resistance.

FIGURE 3.1 DSW Inc.—Resistance and Support

The same thing happens in this chart at the lower line of support but in reverse. The sellers looking to unload their stock were being matched share for share by buyers at 63. This happened several times before the buyers eventually overwhelmed the sellers and the price moved higher throughout May. Looking at the battle this way helps to explain why it can be interesting. As the battle played out in this chart, in mid-March there ended up being more sellers than buyers so the resistance line held and the stock price fell as the sellers prevailed.

At the bottom the buyers eventually won the battle as the sellers were exhausted, and the stock price rose.

This can also have a different outcome. The chart of Hain Celestial Group in Figure 3.2 shows that the battle between buyers and sellers at the 62 level between November 2012 and April 2013 was eventually won by the buyers in May 2013. The 62 price had clearly been important since September 2012 when the price first found support there, and the sellers won battles there four times before the buyers prevailed. It is at that point that these levels are particularly interesting. When the buyers win the battle at resistance or the sellers at support, the stock can move quite a bit until new sellers or buyers show up. In the case of Hain Celestial, it was a $6 move, or nearly 10 percent in only six days! And then on the retest of the 62 level at point B, more buyers showed up, and the price continued higher above that.

FIGURE 3.2 Hain Celestial Group—Resistance and Support

Looking back at DSW shows that a rejection at support or resistance can also be a catalyst for a big move. The third touch before a reversal is not so important, but multiple touches do allow the support and resistance to be seen more readily and in time to be able to measure the potential for a reaction. Prior to the third drop in DSW, the first two drops showed the potential for a move lower to 66 from the 69.50 resistance level or about 5 percent. If you were prepared for a 5 percent move lower on the third failure and claimed it, you were pleasantly surprised to get an extra 5 percent before it stopped. On the rejection at support at 63 the third time, it was clear that a bounce to

68 could happen and even to 69.50 above that.

That brings up another point on horizontal support and resistance. They do not go away. Point A on the Hain Celestial chart shows where what was initially support turned into resistance on a move below it. Then as the price broke back above 62 the resistance turned back into support again at point B. That is another key concept: Support becomes resistance and resistance becomes support when they are breached. It is no wonder, then, that in the DSW chart the move higher in May met resistance almost right at the prior horizontal resistance level.

One final point needs to be made. I mentioned before that sometimes technical analysis works and sometimes it does not. The long candlestick that pierced the resistance in the Hain Celestial chart in late April is a good illustration of this. This candle moved higher like there was nothing stopping it straight from 61 to 64. Why does this happen? It just does. It is things like this that lead technical analysts and traders to frustrate fundamental traders with sayings like "It works until it doesn't."

Resistance and support levels work with rising and falling lines as well. These are often called trend line resistance and trend line support. M&T Bank, shown in Figure 3.3, had a rising trend line support from June 2012 until March 2013. There were no less than five instances when it acted as support until price broke below it in March 2013. Each of these after the second touch was a potential catalyst for a move. It also showed that support can become resistance on the retest in April. Eventually the stock fell nearly 8 percent. Another example of this is shown in the SunPower chart in Figure 3.4. The falling trend line resistance was touched three times before being broken following the fourth touch. With so many touches, the sellers had been exhausted, and the buyers pushed the stock dramatically higher after the breakthrough.

FIGURE 3.3 M&T Bank—Rising Support and Resistance

FIGURE 3.4 SunPower—Falling Resistance

Support and resistance levels are the easiest to eyeball and draw on a chart. The key is to look for a flat, rising or falling consolidation that creates a line. As the stock is approaching the line, it creates a potential catalyst point. These catalyst points then allow you to prepare to trade. If you see that the next potential level of price consolidation, upon a failure at the current one, is far enough away for your reward criteria, then this stock should be on your list of potential stocks to trade. I say “potential” because remember that

these are called support or resistance levels for a reason. They may continue to act in that manner and then no trade appears. I find that horizontal support and resistance are more reliable tools to trade from than rising or falling support or resistance, so if you are at a point where you are choosing between a setup with a stock that has horizontal resistance and one with rising resistance, I would focus on the one with horizontal resistance.

Patterns

There are many shapes and patterns that technical traders use to identify trade setups. In this section we cover the most popular: flags, pennants, Head and Shoulders, diamonds, channels, Cup and Handles, triangles, and Rising Wedges. These are where technical analysis gets its reputation (among nonpractitioners) as a voodoo science. Let's dispel that right now with some facts. As noted in the support and resistance section, a chart of price action can be viewed as a battlefield between buyers and sellers. Every pattern happens as a result of buyers and sellers trading. The action is not always rational and in fact is often based on changes in sentiment that may have nothing to do with the fundamentals of the company, but it gives important information and opportunities. Each situation is a bit different. But most important is that each pattern here is chosen because of the potential for a big move in the stock price upon a trigger based on historical performance. They may never trigger and they may not reach their potential, but in a world with over 5,000 stocks to pick from they can help narrow the field to the best alternatives. Let's get started.

Flags

A flag is a short-term consolidation after a trend higher or lower. If it occurs after a rise in price it is called a bull flag; after a fall in price, a bear flag. These can be flat or they can move back against the previous move. There are three instances of bull flags in the chart for GNC Holdings in Figure 3.5, two that move back toward the breakout level and the third a flat one. Also notice that the breakout of each flag moved roughly the same amount. This is another technical analysis rule of thumb. We say flags fly at half-mast. This means that a flag often occurs halfway in a move, as is shown in this chart, or that the move to the flag should happen again out of the flag. Look for the move that led into the flag and project it forward out of the flag. The price moves from 36 to 42 and pulls back to 38 before moving from 38 to 44. Then it pulls back again to 40.50 before jumping to 46.50. Each advance is about $6, and you could project that on a break above 46 the next leg would be to 52. The short-term stock trader buying the breakout and selling on a stop loss after the top has been formed can often capture more than the total move higher that a long-term buyer might see, in this case closer to $18 on the move from 36 to 46, instead of $10.

FIGURE 3.5 GNC Holdings—Bull Flags

The bear variety works the same way. In the Emerging Markets Index MSCI iShares in Figure 3.6, notice the initial move lower from 44.30 to 43.10 followed by a bear flag moving higher against the

trend, and finally a breakdown of similar size. The value in a flag for a trader comes in identifying it before the breakout and understanding the potential move. These can move quickly, and that is what we as traders like. In the two examples, GNC moved each of its roughly 15 percent legs in a matter of only one week or less. The Emerging Markets Index MSCI iShares moved 3 percent in two days.

FIGURE 3.6 Emerging Markets Index MSCI iShares—Bear Flag

It is important to note that flags move in the opposite direction of the move into the flag. Looking at GNC, note the pullback in each of the first two flags and that the third flag is flat. Flat is okay too, but the preference is a slight pullback in the flag. This shows up in the flag in the Emerging Markets Index MSCI iShares as well, rising against the downward move. This contrary price action shows minor profit taking by sellers being eventually overwhelmed by new buyers.

What you do not want to see is a flag that is rising or falling with the move. In the chart of Chipotle Mexican Grille in Figure 3.7 this is the case. These structures are known not as flags but as pennants and are a sign of trend exhaustion. After a sharp move higher, slow continued buying with falling volume (see arrow) is a signal that few buyers are meeting the sellers from the move. You can see the result in Chipotle Mexican Grille, a full retracement of the move higher and then some. Ouch. Stay away from pennants.

FIGURE 3.7 Chipotle Mexican Grille—Pennant

NYSE:CMG 400.08 ▼ -2.01 (-0.5%) Open: 398.53 High: 403.96 Low: 398.00 Close: 400.08
August 27, 2013
Chipotle Mexican Grill, D, NYSE
Vol (20)
CMG, D
Chipotle Mexican Grill
352.00
348.00
344.00
340.00
336.00
332.00
328.00
324.00
320.00
316.00
312.00
308.00
304.00
300.00
296.00
292.00
24.419M
284.00
280.08
1.019M
276.00
6
Aug
7
13
20
27
Sep
10
17
24
Oct
Source: TradingView.com

Head and Shoulders

A Head and Shoulders pattern is a popular technical pattern that is often misunderstood. Many people can recognize the shoulders and higher head as in the chart for Apple in Figure 3.8. Looking at the April left shoulder, the head in late September, and the right shoulder at the end of November, it is easily recognizable. The identifiers that get misconstrued are (1) that it is not a Head and Shoulders pattern until it breaks below the neckline after making the right shoulder, and (2) that price should touch the neckline after both the left shoulder and the head as well; if all three do not touch the neckline with the price action following through below it, then it is not a Head and Shoulders formation. The shoulders should be about the same height (remember, this is art, not science), and the head should be noticeably higher than the shoulders. These are guidelines about the form.

FIGURE 3.8 Apple—Head and Shoulders

The one rule is that it is not a Head and Shoulders until it crosses the neckline after the right shoulder is formed. Trading it as a Head and Shoulders pattern before then leaves you open to getting decapitated. Ideally, the volume should also be decreasing from the left shoulder through to the right shoulder. This was more important many years ago, but is worth noting and looking out for. What looks like a Head and Shoulders pattern that has flat volume may not be a big deal, but if the volume is rising throughout the pattern you should be suspect.

Why is this pattern important? When you see this formation, the price objective lower (on the confirmation by the breakdown) is a move at least measured from the top of the head to the neckline, projected lower. In this example that would be the 174.14 points from the head to the neckline, projected below the neckline at the point of the break, for a target of about 343 on Apple. It does not mean that the price will go that far, but it is a target based on past experience.

These patterns can have very large moves but can also play out on a much smaller scale and on an inverse basis. The smaller potential Inverse Head and Shoulders on the right-hand side of the chart is an example of this. On an Inverse Head and Shoulders, the volume is less important but each touch at the neckline must still happen. For this pattern to trigger an Inverse Head and Shoulders, it must first reach the neckline now that a possible right shoulder is forming. If it does and breaks through that neckline to the upside, it will trigger a price objective to 536, assuming it breaks through at about 460.

These two patterns can help illustrate an important point about a Head and Shoulders. The pattern stays in effect until either the price objective is reached or it fails by moving back through the neckline and past the peak of the right shoulder. Moving beyond the right shoulder peak negates it. In this example, Apple could trigger the Inverse Head and Shoulders and reach the price objective at 536 without negating the Head and Shoulders top. So it could still then reverse lower to the bearish price objective at 343.

Another point illustrated from these two examples is that the neckline does not have to be horizontal. It is horizontal in the bigger formation, but it is declining in the smaller formation. Experience suggests that the angle of the neckline matters. For a Head and Shoulders top, a flat or falling neckline is more likely to trigger than a neckline that is rising, that is, making higher lows. The opposite is true for an Inverse Head and Shoulders, in which a flat or rising neckline is expected to trigger with a greater likelihood than a falling neckline.

Potential Head and Shoulders patterns are found often, but it is important to wait to trade them until they have triggered. Otherwise a quick reversal at the neckline could decapitate you. The value in looking for them is the size and potential speed of the move. The Head and Shoulders top in Apple did not complete its price objective, but it did achieve 90 percent of it or a 30 percent move in the stock price in less than five months, and this was after it had already fallen 25 percent.

Diamonds

Diamonds are known as a girl's best friend, but they can also be a great trading pattern. They are a form of consolidation pattern. As a consolidation pattern they can happen as a top, bottom, or continuation. The mechanics are similar to the price action described earlier for support and resistance lines. The pattern starts out with probes growing higher and lower that eventually narrow and end with one side exhausting its strength and the other prevailing and moving forward. Diamonds are said to be rare, but I have noticed a lot of them in the past two years. The chart of Timken in Figure 3.9 from 2011 shows a very clean diamond top. The chief characteristic of a diamond is that the consolidation broadens first and then narrows. There is an expanding battle for direction that ends up with both sides eventually getting more aggressive before one runs out of ammunition and the other side prevails. The move into the diamond is expected to be the same as the move out. So if it moves $10 into a diamond, then it should move $10 out.

FIGURE 3.9 Timken—Diamond Top

A diamond continuation is like a flag, in that it usually represents the halfway point for a move. The chart for Nordstrom in Figure 3.10 is a good example of this. A diamond bottom or top can look like a cup or a tower. One of the uncertainties about a diamond is that you do not know which way it will break until it does. In the Timken example, the price moved from 30 to 47 or $17 up into the diamond

so on the break lower it was expected to move down $17 back to 30. In this case it did. But had it broken higher at point A, then the target would have been $17 higher, or about to 64. The Nordstrom example shows the break lower, continuing the downward move. The $3 move lower into the diamond resulted in a $3 move lower out of it before consolidation.

FIGURE 3.10 Nordstrom (JWN)—Diamond Continuation

This pattern can also produce big moves if the move into the diamond has been large or small moves if it has been less extreme. As the price approaches one side of the diamond, put it on your radar but do not trade until it triggers through the diamond. It is important to look for these patterns as they can also create fast moves. In the Timken example, the 36 percent move lower happened in less than two months and the Nordstrom move in just one day.

Channels

A channel is characterized by a narrow horizontal range, much like combining a support and resistance line from the earlier discussion. As the price gets to the top of the range the sellers start to take control, and at the bottom the buyers take control. Eventually one runs out of stock to sell or cash to buy and the other side prevails as the price moves out of the channel. Many like to look at these as boxes, and one is illustrated in Figure 3.11 for Visa from early 2013. The power of the channel looks for an initial move equal to the channel width once it breaks out of the channel. In this illustration the channel is $7.75 wide with a top at 161.50 and a bottom at 153.75. On the break over 161.50, the expected move is to 169.25, which you can see was met in four days. Note that, like in the horizontal support and resistance breaks, this too came back to the breakout level before moving higher again.

FIGURE 3.11 Visa (V)—Channel

This pattern can also act like a flag in that the consolidation in the box after a long move higher can lead to an equal move beyond the channel target. The distinction of naming it a channel is generally due to the duration of the consolidation. A long period of consolidation is a channel, whereas a shorter period is deemed a flag. So if price ran

up $25 into the $5 channel, a secondary target would be $25 above the channel.

Cup and Handle

The Cup and Handle pattern takes its name from its resemblance to a teacup with a tiny handle. The rounding pattern of the cup shows a change of sentiment from sellers to buyers, with the critical juncture being a retracement from the low point of the cup to the prior high. At this point there may be more sellers again as those who did not sell during the cup look to get out at breakeven, and the stock pulls back slightly. This results in the handle. The chart of Navistar in Figure 3.12 is a good example of a Cup and Handle. Notice the peak near 38 followed by the orderly sell-off down to 30 and then a steady rise back to 38.50 before more selling brought it back to 36. The Cup and Handle carries a target higher equal to the depth of the cup to the highest point of the cup added to the breakout. This pattern for the Navistar example has a target on a break back above the high point, 38.50, equal to the climb from the deepest part of the cup to the rim, about $9, added to the break of the rim. So in this case the $9 added to the break back over 38.50 is to about 47.50.

FIGURE 3.12 Navistar (NAV)—Cup and Handle

There are a couple of points to watch for in this pattern. It is generally thought that if the handle retraces more than half of the cup, the pattern is negated or at least less powerful. Also, rounder

cups perform better to the upside than sharp V patterns. Finally, note that this pattern, too, has a large potential for gain, with upwards of 20 percent in the illustration.

Triangles

Triangles are some of the most frequent patterns found in charts. There are three types that are important to recognize: symmetrical, ascending, and descending.

A triangle is referred to as a symmetrical triangle when the price action is wide at first and narrows to lower highs and higher lows over time around a horizontal line. The price movement above and below the centerline is symmetrical, like in the chart for TravelCenters of America in Figure 3.13 (again, this is art, not science, so this counts as symmetrical even though the top half is larger than the bottom half). In this example you can see that at the wide end of the triangle there is a price spread of about $2.50 and it is fairly evenly split around a centerline at 11. The importance of a symmetrical triangle can be twofold. First, the triangle itself often resolves the war between buyers and sellers with a move out of the triangle that is equal to the widest part of the triangle. In this case a $2.50 move would be expected out of this triangle. This alone can make it worth watching for a breakout, as the chart shows it is equivalent to more than a 20 percent move. Second, these triangles often act like flags as well, flying half-mast, so a secondary move is also projected. For a move higher out of the flag on TravelCenters of America, you would project the secondary move equivalent to the move that took it into the triangle. From the bottom near 7 to the midline at 11, or $4, added to the midline would give a secondary target of 15 on a breakout of the triangle higher.

FIGURE 3.13 TravelCenters of America—Symmetrical Triangle

For a symmetrical triangle (and all triangles for that matter), it is said that the power of the move is strongest about two-thirds of the way through the triangle. As price moves closer to the apex, the power of the expected move diminishes. Beyond the two-thirds point, it is time to give less focus to the stock and look elsewhere.

One final note on symmetrical triangles: They can break either up or down. As price approaches one of the sides, it is time to prepare for a break in that direction. A failure to break means there is no trigger for a trade and you just keep watching. This point is applicable to all triangles and trading setups. Wait for completion of the pattern and a trigger to enter a trade.

Ascending triangles have similar characteristics to symmetrical triangles, but look more like the horizontal resistance described previously on the top side. The bottom (and thus triangle shape) comes from progressively higher lows. The chart of PPG Industries in Figure 3.14 from 2012 gives a good illustration. On the left-hand side the two trend lines outline the ascending triangle. There is a flat horizontal top and a rising trend line as support that creates the triangle. The measurement for the potential move is taken in the same way as in symmetrical triangles. Look for the widest spot of the triangle, where the price hits the rising trend line first, and measure to the horizontal resistance. On the PPG chart this is about $15. That move is then added to the breakout price level to create a target on

the move. Adding $15 to the breakout level of about 105 gives a target of 120. You can see that this did reach that target and a little more (to 122) before a pullback in November.

FIGURE 3.14 PPG Industries—Ascending Triangle

Recall that the touches along either the horizontal resistance or the rising trend support are potential action spots. Each time the price approaches the trend lines is a time to analyze and prepare for a potential trade. Although it is presumed that ascending triangles will break higher, they can break either way. So the touch on the rising trend line in June and again in July could have resulted in a breakdown out of the triangle and should have been watched when the price approached it as well. This chart is a very good one to review, as it also illustrates that a breakout does not always result in a straight-line move to a target. Notice that the price consolidated after moving above the triangle with a move from 98 to 112, or $14. As it broke out of consolidation in the horizontal channel, it had a target similar to that of the initial triangle break (that is, to 120). You can see all this from the arrows. This is interesting because when two price targets line up from two different methods of projection, it increases the significance of the target. Think of it as two different sets of traders who are now targeting the same higher level.

Descending triangles round out the triangle family. Where ascending triangles are presumed to break higher, descending

triangles are presumed to break lower out of the pattern. But this is not always the case and in fact they also can break either way. They look the opposite of ascending triangles, as shown in the chart for Atwood Oceanics in Figure 3.15 from late 2012 into 2013. The horizontal support at the bottom is tested again and again and progressively lower highs form a falling trend resistance. The price action is still the widest at the left side of the pattern and becomes narrower as time progresses, squeezing price into a tighter range against horizontal support. In this illustration the maximum price range is just over $6.25, so the break of the pattern is looking for a similar move. But this example also shows a case where the expected breakdown did not happen. Rather, price broke the pattern to the upside. This led to a target of about 52.25 (the breakout at 46 plus 6.25). From the chart you can see it was attained in about one month and it continued on to 55.50, or 150 percent of the 6.25 move. There is more on this extension later in the book.

FIGURE 3.15 Atwood Oceanics (ATW)—Descending Triangle

All three types of triangles—symmetrical, ascending, and descending—have some similar characteristics. All project a move out of the triangle that is equivalent to the broadest part of the triangle. All are thought to have the most powerful moves about two-thirds of the way through the triangle. As the price action moves through the power zone and into the apex, it becomes uninteresting to trade. All

can break either higher or lower as the battle between buyers and sellers plays out, although ascending triangles are biased for a break higher and descending triangles for a break lower. Most important, though, is that these patterns can generate large moves in small amounts of time and that is why we look for them. Each of the three examples was looking for at least a 13 percent move, and the two that triggered made those moves in one and two months' time. Those are enormous annualized returns.

Rising Wedge

The Rising Wedge looks like a symmetrical triangle, except that it is tilted upward. These are typically thought to be bearish patterns, but like all other triangles can break either up or down. The chart of JC Penney in Figure 3.16 from late 2011 into 2012 shows a Rising Wedge. The width at the back of the wedge is about $6 (from about 29.50 to 35.50), so an expected move out of the wedge would be $6. And you can see that once the price broke out of the wedge, although it was a surprise to the upside, it did move a little over that $6 expectation higher to 43.

FIGURE 3.16 JC Penney—Rising Wedge

The opposite variation, a Falling Wedge, also exists. It naturally has a bias for a breakout higher and is considered a bullish pattern, but can break out of the wedge in either direction as well and seek the same targeted move. Like every pattern discussed here, an approach of price to the boundaries of the pattern is a time to prepare for action.

Conclusion

There are hundreds of other patterns and variations that traders swear by, and if you are comfortable with one or many of them, by all means go ahead and use them, too. The point is that these formations can lead to extraordinary short-term moves in the stock price. The patterns described in this chapter are some of the most common and widely followed ones. Discovering these formations can vastly increase your chances of a successful trade. If the pattern is there but the target is not big enough, then pass on it, and look for the next one. Remember that the pattern is just a setup. Do not trade it until it triggers. I see many traders try to cheat, buying the stock in anticipation of a break of a resistance or support level. Sometimes they are right, but many times they are wrong and end up taking a loss as the stock reverses direction at resistance or support. Common wisdom tells traders to keep losses small, so it may seem contradictory to suggest that it is not worth taking a lot of small losses when the expected move is so large. But look back at all the charts in this chapter. How many times did the price fail to trigger? Multiply all those times by even a 1 percent stop loss on a cheating early entry and you will substantially lower your return. Now look at all of the times that the breakout happened and then continued the move. Taking just those trades that have confirmed breakouts has a much higher success rate and higher return on your capital. Plus you do not get frustrated from all of the losses, even if they are small. Those lines were named resistance and support lines for a reason. Wait until they have failed to live up to their reputation to start your trade.

You should now have a deeper understanding of support and resistance. You should also be able to recognize many classical technical patterns, including flags, pennants, Head and Shoulders, diamonds, channels, Cup and Handles, and various types of triangles and wedges. You should also be able to measure an expected move from the pattern and be able to determine if the pattern is in a situation that is ready to trade. But this is just one form of technical analysis. Let’s move on to the next form.

Japanese Candlestick Patterns

There are several methods of illustrating the price action of a stock. The most popular are bar charts, line charts, area charts, and Japanese candlestick charts. Bar charts were discussed in Chapter 1. Line charts use just the closing value to create a smooth line that rises and falls over time, and area charts fill in the space under that line to distinguish it from the territory above the line where price did not travel. Japanese candlestick charts are the charts used in the previous illustrations on patterns. Like bar charts, they convey a lot of information: the open, high, low, and close. I prefer them because they are also color coded to show at a quick glance whether the price action was an up or down day (see the sidebar in Chapter 1). A green (or white) candle is a positive day and a red (or black) candle is a down day. These have a long and robust history, and I urge you to learn it. Steve Nison is the father of candlestick charting, and his books are a great resource that I refer to often; his classic text is listed in the Additional Resources section at the end of the book. Japanese candlestick charting is a fascinating subject, but that is not for this book. What is important for our analysis is using the result of that history and Nison's work to identify potential trade setups.

In this chapter you will learn how to identify specific candlestick formations and understand their significance. With that knowledge, you will then learn how to identify potential trading opportunities using these formations. These can be split into three groups: reversal patterns, continuation patterns, and indecision candles. These patterns can signal an opportunity for a new trade or they can signal that a trend reaching resistance may be ending. Almost all of them need some kind of confirmation. There are many of these; we will focus on some of the most common reversal and continuation patterns, but also introduce a couple of others to help. They usually come in pairs

describing whether they are observed in an uptrend or a downtrend. One drawback with Japanese candlestick patterns compared to classical technical analysis is that the formations do not give a price projection or target, just a direction. That is perfect for the trend follower but means that they become more useful when combined and confirmed with other methods when applying the setups to options trades. And that is where the focus should be. Adding the knowledge from Japanese candlestick patterns as another determinant of when a trade catalyst is about to happen. Let's move on to the first pair.

Reversal Patterns

Here are some key reversal patterns and a discussion of each.

Hammer/Hanging Man

The Hammer comes at the bottom of a downtrend, and a Hanging Man occurs at the top of an uptrend. I have always imagined the Hammer nailing into place a bottom and a Hanging Man being that guy hanging over the edge of a cliff by his fingernails. These are single candlesticks representing one time frame of price action. Both are characterized by an open and a close near the top of the price action for the day but with a probe lower intraday. The real body (difference between the open and the close) is small compared to the lower shadow created by that intraday probe lower. It is not very important whether the open or the close is higher, so the color of the Hammer or Hanging Man does not matter, just that both the open and close are in the top portion of the price action of the day.

If the opening and closing prices are very close to each other, this candlestick looks more like the letter T than a hammer. There are all sorts of crazy names for specific candles that fit this description. If the opening and closing prices are the same, then it is also a doji. This has added importance as it signifies indecision, with buyers or sellers in control to start the day, then reversing, and then sellers or buyers taking control to bring the price right back where it started. If that were not enough, if the doji happens in an uptrend and at the low price of the day, it is called a Gravestone Doji. This is thought to be very bearish. And finally, if the doji happens at the high price of the day, it is called a Dragonfly Doji. At the bottom of a downtrend a Dragonfly Doji is the one candlestick reversal pattern that does not need confirmation the next day to trade. It is also where the name of my company, Dragonfly Capital Management, comes from.

The chart of Apple in Figure 4.1 as it was making its 2012 highs and then pulling back contains examples of both the Hammer (in the yellow or lighter circle) and the Hanging Man (there are two—the first, second, and fourth candlesticks in the blue or darker box). Each one of these is a type of Hammer or Hanging Man candlestick. This candlestick pattern shows a potential for a reversal of the trend. And each needs to be confirmed to trade. A Hammer is confirmed by a higher close the following period and a Hanging Man by a lower close the following period. When confirmed by a close in the direction of the reversal, like the first candlesticks out of the box and the circle, these are triggers to trade a new trend.

FIGURE 4.1 Apple—Hanging Man and Hammer

We are just getting started, and already you can see that Japanese candlestick patterns can have colorful names. Let's move on to the next pair. They can also set up a new level of preparedness to look for reversals. The Hanging Man candles in the (blue) box gave a heads-up for a potential reversal before a consolidation channel had even started to form.

Bullish Engulfing/Bearish Engulfing

This pair is very easy to detect. The Bullish or Bearish Engulfing candle is one that extends beyond the range of the previous candle in both directions. These need confirmation to signal a reversal: a higher high and a lower low, with the recent candle engulfing the total price action from the previous day's candle. Some traders use just the real body to make this determination, measuring one against the next, whereas others use the full candlestick, including the upper and lower shadows. As this is an art and not a science, either is fine. To be valid, each needs to be confirmed the next day by a close in the reversal direction, but it does not really matter which method you use if you wait for that signal. These can give a heads-up of a change in direction of a trend, and that is why we look for them.

An example of the Bullish Engulfing is shown in the chart for Estée Lauder in Figure 4.2 from late 2012 into 2013. Notice that the long (green or white) candle gobbled up the entirety of the previous (red or black) candle, including the long upper shadow or tail. All it takes is a penny on either side for this candlestick pattern. Like other reversal patterns, it needs to be confirmed, in this case with a higher close the next day. Here the next day was a "gap and go," so the pattern did not technically confirm until the price had moved to 60.68. From that point you can see that it continued to move to over 64 for a nice return.

FIGURE 4.2 Estée Lauder—Bullish Engulfing

Often the confirmation can eat well into the potential profit in the reversal trade. Because of this, many traders cheat on their entry, buying early, especially when the Bullish Engulfing candle is so large, to increase their chance for profits. The technical confirmation for this reversal came at about 60.75 the next day, a full $2 above the Bullish Engulfing candle closing price. This can be dangerous. Notice a little further left in the chart that point A is also a Bullish Engulfing candlestick after a consolidation period in the same stock. It did not confirm with a higher close the following day, though, and never went higher. Jumping the gun on this trade would have resulted in a loss. Do not jump the gun to enter a trade; wait for the confirmation.

With that said, there is another signal in this chart that would get many traders to cheat with regard to the labeled Bullish Engulfing candle. The actual Bullish Engulfing candle itself is also what is known as a Marubozu candle. The Marubozu is a long candle with very little or preferably no upper and lower shadows. This signifies a very strong trend day, in this instance starting at the low, continuing higher all day, and signaling more upside to come. It also requires confirmation to trade, but the combination of a Marubozu and a Bullish Engulfing candle would get many traders to enter on a positive open the next day.

The Bearish Engulfing candle operates the same way. The chart of Take-Two Interactive Software in Figure 4.3 shows two examples. In each case the Bearish Engulfing candle has a higher high and a lower

low. In the first example it is confirmed lower the following day with a close at 13.55 but never really goes much lower with the ultimate low at 13.24. This one was a dud. The second example was never confirmed, as the candle the next day closed above the close on the Bearish Engulfing candle and in fact the following day a Bullish Engulfing candle printed and was confirmed higher two days later for an eventual move up to near 17.

FIGURE 4.3 Take-Two Interactive Software—Bearish Engulfing

The Bullish and Bearish Engulfing candles can signal powerful moves. But, as seen in these examples, cheating on an early entry before confirmation can lead to a loss. Wait for the confirmation. From my experience these candlestick patterns have more power for a trend reversal the longer the trend that precedes them. The first example, with a nine-day downtrend before a Bullish Engulfing candle, proved more important than the others. Also, in each of these instances there was no long-term support or resistance or other trend line that came into play to draw your attention to a potential catalyst for reversal; there was only the candlestick pattern.

Dark Cloud Cover/Piercing Line

The next pair reverts back to more colorful naming. The Dark Cloud Cover evokes a gloomy picture of a storm approaching, and it should. It describes a candlestick where a long positive day is followed by a reversal of over 50 percent of that move. It rains on your happiness from the move higher the previous day. The chart for Crocs in Figure 4.4 shows the down (red or black) candle on December 12, 2012, following the up (green or white) candle: an up day followed by a higher open and a down day, but not an engulfing candle. This pattern also needs to be confirmed with a down day the next day to signal a trend change lower. Many will cheat on the entry on this pattern as well, but notice that it did confirm lower and continued down for the next day.

FIGURE 4.4 Crocs—Dark Cloud Cover

There is a second example five candlesticks to the right that also confirmed and moved lower. It may not be obvious from the short scale of the chart, but these happened in an uptrend, and would not be expected to yield strong reversals. But for tactical shorts that could potentially turn into big reversals, the candlestick pattern offered entries that did not show up from classical technical analysis. The potential to add 3 percent on the first short (confirmation the next

day) to a stock in an uptrend is not too shabby.

The Piercing Line or Piercing Candle is the bullish counterpart to the Dark Cloud Cover. It has a military connotation like many Japanese candlestick patterns: piercing the line to reverse the move against you and advance further. The chart for Kroger Company in Figure 4.5 illustrates this pattern with a long red (or black) candle followed by a green (or white) candle that opens below the previous close and then retraces over 50 percent of the previous day's move. The confirmation candle came the next day and then the price ran higher from 21.70 to 23.60 over the next 11 days. You should notice that in that uptrend there was a Dark Cloud Cover pattern—the (red) candle with the long lower shadow on September 7 that followed an up day—but also that it never confirmed lower. So the trend never changed. Obey the signals.

FIGURE 4.5 Kroger Company—Piercing Line

The Dark Cloud Cover and Piercing Line can signal powerful moves. These also tend to perform better from my experience the longer the trend that preceded them. Keep your eyes open for these patterns, as they can foretell a trend change before other patterns see it.

Stars

Stars come in three varieties: Evening, Morning, and Shooting. They are all reversal patterns after a trend. A Star is characterized by a three-candlestick pattern. The first is a relatively long real body candlestick in the direction of the current trend. The second, often referred to as the Star, is a small real body candle that continues in the direction of the trend. It does not have to close in the direction of the trend, just extend it a bit and be small. It should not overlap with the first candle. The third is the reversal candle, which is longer. Not until the third candle is printed does the reversal stand.

The Evening Star, as you might have guessed, happens at the end of an uptrend. As the day comes to a close and moves into evening, this also describes the Evening Star late in a trend higher. The (yellow or light) oval on the chart of Illumina in Figure 4.6 from late 2012 is a good example. These patterns show strong demand from buyers that forces the stock to gap higher in price, only to find that there are no follow-through buyers, and maybe there are sellers in the following day. The pattern does not need further confirmation but, as shown in the example, it does not always work out. This one confirmed on the close at 51.17 and moved lower only as far as 50.25 before turning back higher. If you took this short trade you were likely stopped out quickly for a small loss. We will talk more about stop losses in Chapter 10.

FIGURE 4.6 Illumina—Evening Star

The Morning Star, the counterpart to the Evening Star, brings to mind a fresh start, like you have just awakened and are ready to go. In this sense it is the start to a trend reversal higher. It starts with a long candlestick lower followed by a gap down with a small real body and then a gap higher and a long body candle against the previous trend. The (yellow) circle at point 2 on the chart for Marriott in Figure 4.7 is a good example of a Morning Star. This one did signal a new trend higher and a move from the low at 25 to 28.50 over just a few days. Again you can notice that the third candlestick runs quite a bit and the close at 26.60 absorbed nearly half of the move higher. Because of this possibility, many traders shortcut the Evening Star and Morning Star patterns by buying on the signal that the third candle is reversing intraday instead of waiting for the close to confirm it. The most important part of the pattern is the smaller gapping candle and the closing of the gap. That is what to look for when prepping for a trade.

FIGURE 4.7 Marriott—Morning Star and Shooting Star

The Shooting Star is a variant of the Evening and Morning Stars combined with the long shadows of the Hanging Man and Hammer candles and the small real bodies of the Gravestone and Dragonfly Dojis. It can occur after a trend higher or a trend lower and typically has a long shadow and small real body after a gap from the trend, with the real body at the extreme end of the candlestick nearest the trend. It is different from the Evening and Morning Stars in that it is a single candlestick.

The (blue) oval at point 1 on the Marriott chart shows a Shooting Star at the bottom of a trend lower. The gap lower is followed by a small real body candle with the body at the top of the range. This one did not give a lot to the upside, but there was a small move. As a side note here, the broader picture for Marriott during this four-month period shows a bottoming process while both the Shooting Star and Morning Star occurred. There are some things to learn from this chart. First, there can be reversal signals that occur in a bottoming pattern that do not pan out. You need to be observant of them because you never know which one may eventually signal the breakout. In this case it was not until the Bullish Engulfing candle, the fourth reversal signal (point 4) that the trend eventually reversed higher. Next, reversal signals in a bottoming process or consolidation often peter out before a solid trend begins to follow. You may take losses during these signals, but that is okay. They give information (a trend change in this case from down to neutral), and that is useful for future monitoring. If you do see a consolidation channel forming, you can be a bit more conservative with a trade setup.

The chart of Netflix in Figure 4.8 also has a Shooting Star, but at the top. In this case it was at the very top, the all-time high. This is the holy grail of trading signals that traders look for. Notice the gap higher with a long upper shadow before a pullback and close near the open. A short entry the next day would have had a few fits and starts along the way, but the trend eventually took the price 79 percent lower in less than five months. That is a trade. And this is why we look for these patterns. It is not often that you get a signal at a top and then have a trend of this magnitude, but it does make the business more fun. And notice that there were no classical technical analysis signals that this reversal would occur. Before you all send me e-mails asking how much of this one I caught I have to confess the answer is zero. I picked the wrong time to spend four weeks driving around the country with my family. You win some and then some just keep you hungry for the next one.

FIGURE 4.8 Netflix—Shooting Star

Continuation Patterns

Following are some continuation patterns along with a discussion of each.

Three Advancing White Soldiers/ Three Black Crows

This next pair is my favorite. The Three Advancing White Soldiers is a bullish pattern. This is illustrated using the chart of PNC Bank in Figure 4.9 from early 2013, the three (green or white) arrows point out the pattern. In the olden days when there were only black and white charts, white stood for an up day and black for a down day (instead of the green for up and red for down in these charts on the computer screen). So three overlapping white candles were a big deal. The key to this pattern is that the real bodies of the candles overlap and proceed higher each day with relatively small shadows. If there are gaps between them or if they have long real bodies or shadows there is a greater chance for the pattern to exhaust quickly.

FIGURE 4.9 PNC Bank—Three Advancing White Soldiers

Three Advancing White Soldiers signals a strong trend that will continue higher—white for the good guys and they are moving forward. In this example, the first one confirmed the Hammer reversal candle and then the price started higher, running up from 62.50 to about 66.50. Since it is a multiple-candle pattern, it does not need any confirmation. Just buy 'em up. When there are gaps between them, this is called an Advance Block. The three (green or white) candles

from April 8 to April 10 (further to the right in the chart) illustrate an Advance Block. Despite the consecutive candles, the gaps are a sign of caution (perhaps too much eagerness to buy) that can cause the trend to end abruptly when the buyers are done.

The opposite pattern, Three Black Crows, brings to mind a bunch of large, obnoxious birds picking up seeds or crops or the grass out of your lawn. Nobody likes crows today, and apparently the Japanese didn't, either, 1,000 years ago. This is a bad visual and it foretells a downside trend. If they were created today, this pair of patterns might be called Three Lottery Winners and Three Suicide Bombers. The chart of Under Armour in Figure 4.10 has a Three Black Crows formation marking a reversal lower. A prolonged downside movement followed. The pattern triggered at 39.61 on the close of the third candle lower and ran eventually to 27.20. This also needs no further confirmation before entering short.

FIGURE 4.10 Under Armour—Three Black Crows

These two patterns are important and have the best result when they come after a long trend in the opposite direction. So a Three Black Crows formation is strong directly after a run higher like this one in Under Armour from 31 to 40. One other point can be illustrated in the Under Armour chart. Notice that there were also three (red or black) candles in a row later in the chart, highlighted in the ellipse, a reverse of an Advance Block. These candles gapped lower, and one had a long real body, ending up exhausting the run

quickly. For the pattern to be valid, the real bodies must overlap and be average in length. I cannot give you a definition of average length. It is kind of like the current definition of pornography. You will know it when you see it. Look relative to the surrounding candles.

Rising and Falling Three Methods

Maybe the most boringly named pair of patterns, these were certainly not coined by someone seeking favor with the emperor. The Rising and Falling Three Methods patterns are different from all of the previous patterns in that they signal a continuation of a trend, not the start of a new trend or a reversal. These are typically five-candle patterns, with a long candle in the direction of the trend, followed by three small body candles where the entire real body remains inside the real body of the previously mentioned long candle; then the fifth candle is another long candle in the direction of the trend that makes a new higher high or lower low. So the formation consists of a long candle, three smaller consolidating candles, and another long candle resuming the trend. I picture these as a sandwich with the two long candles as the bread and the three interior candles maybe as the turkey, a slice of cheese, and a tomato (or an onion if that suits you better).

The Rising Three Methods is illustrated in the chart of Goldman Sachs in Figure 4.11 from early 2013, in the (yellow or light) box. Notice that it happens in the middle of the trend, when it looked like a consolidation might occur. It might also be interpreted and a bull flag or a consolidating channel. Also notice that the interior candles of the pattern had shadows that exceeded the first candle's range, but none had real bodies that were outside of the real body of the first candle. Finally, I should point out that there were four interior candles and not three (both a tomato and an onion). There is some leeway on this to add a candle or two or subtract one. How many is too many, you ask? Again, back to the porn definition: You will know it when you see it. We are not looking for a quadruple-decker sandwich, just lunch before the next move higher. Finally, notice that the run continued for $12 after the pattern completed, despite having already moved $26 into the pattern. Just because a stock has had a long run does not mean it cannot have another run equally long or even longer than the first run.

FIGURE 4.11 Goldman Sachs—Rising Three Methods

The Falling Three Methods is similar but in the opposite direction. So there is a long down (red or black) candle followed by three candles with small real bodies and then another long down (red or black) candle to a new lower low. The chart of Foot Locker in Figure 4.12 shows this pattern in a not so tidy way. In the (yellow or light) box you see the first long (red or black) candle, but then the next three candles jump around and look like they could be Hammer reversal candles. But each conforms to the Falling Three Methods by maintaining the real body within the long first candle. The long (red or black) candle following to confirm the pattern and continued downside is also unlike what you might see in a textbook. This is not a neat sandwich visual, but one that is mangled or falling apart—like you packed it in your luggage and brought it on a trip, only to find it smushed when you are ready to eat it. All the pieces are there, and it tastes great, but it does not look very good. But like the sandwich, it is the taste that matters, not the looks. Nonetheless it is a Falling Three Methods, and the trend continued lower for another $3.

FIGURE 4.12 Foot Locker—Falling Three Methods

Although these are continuation patterns, they can also be interpreted as a change in the trend, if you can expand to thinking of the trend in three options: up, down, or sideways. The trend moves from one direction to sideways and back to that same direction again. In this way the trend change can signal a new entry if you missed the initial entry at the beginning of the trend.

Indecision Candles

There are three types of indecision candles worth discussing: doji, Harami, and Spinning Top. These candles look just like the middle candles in the Star formations with a small real body. Three things distinguish them from each other: their placement relative to the prior candle, the size of that real body, and the sizes of the shadows. What they all have in common is a signal of indecision, often thought to be a reversal signal, when they come after a long trend.

Doji

The doji is probably the most recognized and talked-about candlestick. Its open and close are at the same level, so there is no real body. The chart of Jazz Pharmaceuticals in Figure 4.13 shows one on May 7, 2013. These candles are commonly thought to be a sign of a reversal but they truly indicate indecision. Think about how they are formed. The stock opens at one price, heads either higher or lower, reverses to the opposite direction, and then ends up closing unchanged. It is like it has attention deficit/hyperactivity disorder (ADHD). At some point, it was expected to go higher and then lower and ended up back where it started—the definition of indecision. But it also means that a trend that had been in place, like that in Jazz, has lost its strength. It could regain it or it could start a reversal. It is better to think of these types of candles as potential action points, almost like when a stock reaches a support or resistance line. It can move either way, and you need to be prepared.

FIGURE 4.13 Jazz Pharmaceuticals—Doji

Spinning Top

Looking like the offspring of the doji and a Star is the Spinning Top. It distinguishes itself by generally having longer shadows than a doji or Star and a small but visible real body. The same argument for showing indecision as in the doji applies here. It may be an even greater indecision given the longer shadows. The chart of Salesforce.com in Figure 4.14 shows two examples. Spinning Tops should be viewed like a doji, a potential for action.

FIGURE 4.14 Salesforce.com—Spinning Top

Harami

The last of the trio, the Harami, is a little bit different, as it is much more likely to be a reversal signal than are the previous two candles. A Harami can look like a doji or a Spinning Top or just a small real body candle. The Harami is also the opposite of a Bullish or Bearish Engulfing candle. Classic technicians would call it an inside candle. That is because the full body of the Harami is contained within the body of the previous candle. The chart of Fresh Market in Figure 4.15 highlights one that is in the form of a Spinning Top. This one did confirm higher and initiated a trend reversal. The Harami is also a call to look for action to follow, but in this case almost always to look for that action to be a reversal.

FIGURE 4.15 The Fresh Market—Harami

Conclusion

Japanese candlesticks have been around for more than 1,000 years and have a great and storied history. We have only scratched the surface with these examples. There are many more Japanese candlestick patterns with such fun names as Tweezers Tops, Three Mountains and a River, Belt Hold, and Tower Tops and Bottoms as a few examples. Do continue to explore more on your own. Learning should be fun. The most important thing to take away from this chapter on Japanese candlesticks is that one or a very few days can signal a change in the trend or a point of action and an opportunity to trade and profit. These signals often do not show up anywhere else in technical analysis. By understanding the nuances of the Japanese candlesticks and combining them with the patterns from earlier in the book, you can now start to create a technical mosaic for each stock you review.

You should now be able to recognize reversal, continuation, and indecision candlesticks. The reversal candlestick pairs—Hammer and Hanging Man, Bullish and Bearish Engulfing, Dark Cloud Cover and Piercing Lines, along with the Stars—can give an indication and then confirm a reversal in just three candlesticks, with plenty of time for you to know when to act. The continuation candlestick pattern pairs like the Three Advancing White Soldiers and Three Black Crows, and Rising and Falling Three Methods, can give you an understanding that a trend will continue despite consolidation or being extended. Knowing the indecision candles can give you a leg up on others, as you can now be prepared for action in either direction when you see one of these candles. A final point: if you look back through the Japanese candlestick chart examples in this chapter, you will notice that the reversal, continuation, and indecision patterns occurred without corresponding signals from classical technical analysis. This leads to the conclusion that combining these two styles can be beneficial to your analysis and trading. But it does not end with these two methods.

Derived and Quantitative Analysis

There are many technical methods of analyzing stocks that take on a more quantitative bent or are derived from a technical change in a pattern. Many of these are either directly from Fibonacci analysis or derived from it. This chapter explores some of these: Fibonacci analysis, Elliott Wave principles, and Harmonics, as well as introducing Gann analysis and follow up on Andrews' Pitchfork analysis presented in Chapter 1. By the end of the chapter you should know the major Fibonacci retracements and extensions, understand rudimentary Elliott Wave analysis, and observe the potential that a Harmonic pattern may be in play. This is getting into more advanced technical analysis, and no one can be an expert from reading one chapter in a book on these subjects. But a basic understanding of their principles will help in forming trading ideas and analysis. As with all other areas, there is suggested additional reading on these subjects at the end of the book. Let's start with Fibonaccis, as so much is built on them.

Fibonacci Analysis

Leonardo da Pisa, better known as Fibonacci, died over 750 years ago, but his influence is still felt today. He led a fascinating life and is responsible for some of the most important aspects of modern mathematics, despite the fact that you may never have learned about him in your math classes. He is credited with bringing the Hindu-Arabic numeral system (a fancy name for what we use today) to Europe, as well as a numerical sequence that is in itself important to technical analysis and is the building structure for other systems, the Fibonacci sequence.

The Fibonacci sequence was not actually discovered by Fibonacci himself. In his work, Liber Abaci, he explained the derivation of the sequence, which originated in Indian mathematics, by describing how a population of rabbits would grow under ideal circumstances. By starting with one rabbit and adding another to get two rabbits, the rabbits would mate and then their offspring would mate. Thus the iterations of the sequence were laid out. You can read more about the derivation, but you get the gist. The numbers grow exponentially. The actual sequence expands by adding the last two numbers to get the next one. The first 13 numbers in the sequence, then, are 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, and 233. These in themselves are fascinating, as they are found throughout nature. There are many varieties of flowers that have 3, 5, 8, 13, 21, or 34 petals, for example.

But I digress. What is most interesting for the technical trader is the ratio of each number to the previous number. This ratio, known as the Golden Ratio or Φ (phi), approaches 1.618 as the sequence progresses. It only takes the first 13 numbers to start getting very close to Φ. This ratio is also found all throughout nature. The most famous example is the nautilus shell spiral, but it also describes the markings on moths, the proportions of a dolphin, and roughly the ratio of the top and bottom of the human body. This ratio has some very interesting mathematical properties. For instance, 1/1.618 is equal to 0.618. But enough of the geeky math stuff. If you want to read more about this, there is plenty to read out there. The point is that this ratio is embedded in the human experience and subconsciously pleasing to the human eye. It is on this basis and from practical application that the use of the Golden Ratio in technical analysis came about.

Applied to technical analysis, Φ and some of its derivatives become important as measures of flow for a trend or pullback. Specifically, the ratios 0.236, 0.382, 0.5, 0.618, 0.786, and 0.886 are the most important in terms of retracements or pullbacks from a trend. The

0.618 is obvious. The others are derived from it. 0.786 is the square root of 0.618, 0.886 is the square root of 0.786, and 0.382 is 0.618 squared but it is also found in taking the ratio between numbers in the sequence that are two numbers apart. And 0.236 is the ratio between numbers that are three positions apart. The most commonly used ratios are 0.382, 0.5, and 0.618. These ratios are used to determine a potential area for a pullback from a major move in one direction. That is to say, a move of 100 points higher in a stock will often find support on a pullback or reverse back higher after a move lower of 38.2, 50, or 61.8 points. Derivations of Φ are also helpful for targets on a new trend as it extends beyond the length of the initial trend. Extensions of 1.27, 1.382, 1.5, 1.618, 2.0, 2.24, and 2.382 are common. So after a pullback the next trend may extend to 127, 138.2, or 224 points with resistance at other extensions. Collectively, these fractions and extensions are known as Fibonacci ratios.

Right now I know you are thinking that I am crazy if I am going to let the ratio of the number of petals in a daisy (34) to the number of petals in a black-eyed Susan (13) determine when I will buy or sell a stock. So let's look at a few examples to show that this is for real. The monthly chart for Goldman Sachs in Figure 5.1 from the peak before the financial crisis is a good example. The initial down move from 235.07 to 44.70 retraced to above the 61.8 percent Fibonacci level before pulling back to 162.35 and settling for a couple of months. From there it bounced between the 50 percent and 61.8 percent Fibonacci levels before cracking lower. The 61.8 percent level became important resistance again in early 2011 before a pullback to the 23.6 percent level. From there it bounced between the 23.6 percent and 38.2 percent until breaking higher and leveling eventually at the 61.8 percent level again. Just from this chart the major Fibonacci levels played a role as either support or resistance at least seven times!

FIGURE 5.1 Goldman Sachs Monthly with Fibonacci Levels

The weekly chart of Netflix in Figure 5.2 is another good example. In this one we see the collapse from the high at 305 through the 78.6 percent level before a bounce that was contained by the 61.8 percent Fibonacci level and an eventual bottom after retracing 88.6 percent of the prior move higher. At that point the price started to rise and met resistance at the 38.2 percent level, sending it back lower to the 50 percent level before a bounce up to the 23.6 percent level. I have added a second set of Fibonacci levels in the second Netflix chart in Figure 5.3 measuring the retracement higher of the collapse of 2011 into 2012. These show that after breaking above a 50 percent retracement of that move it became support. At this point it can get complicated. The stock price used a pullback to the 38.2 percent original Fibonacci level as a ceiling and the new 50 percent level as a floor to consolidate. It then dropped to the original 50 percent level and then moved higher to find stability over the new 61.8 percent level before a touch higher at the old 23.6 percent level. Getting knocked back there, the new 61.8 percent level provided support again. Each of these moves can also be broken down into a series of Fibonacci levels.

FIGURE 5.2 Netflix Weekly with Fibonaccis

FIGURE 5.3 Netflix with Nested Fibonaccis

With many changes in trend, continually adding Fibonacci levels can get messy, but it also illustrates several important points. First, nested Fibonacci levels can add strength to support and resistance when they get very close to each other. But it is important to use a level of granularity that reflects the proper scale for your trading style. As a swing trader, it is nice to know that the levels of 237.17 and 304.70 in Netflix are important, but my range will likely be inside

both of them. For a longer-term position holder, they make more sense and you might also want to add some upside extensions. Adding indicators just to fill up a chart can be distracting. Know where they are, and if they are not important to your time frame or trade, then remove them again.

Second, it is good to know when Fibonacci levels occur very close to each other. These Fibonacci clusters from the nested measurements can add a lot more strength to the importance of that level. Just imagine if the day traders, swing traders, position traders, and long-term investors all think that the 304.70 level is important. With traders on multiple time frames targeting the same level, it is likely to give some resistance for a longer period of time. Finally, looking at nested Fibonacci levels can also reveal large pockets where there is no potential Fibonacci resistance or support. Wouldn't you want to know that there is smooth sailing for a while instead of a lot of rocky projections that may get in the way?

When it comes to moves outside of the retracement range, Fibonacci extensions can be one of a limited set of tools to use to identify where a natural rhythm pause may occur. The Goldman Sachs chart in Figure 5.4 is a good example of this. The move lower from 128.67 to 90.45 was retraced and stalled at the 78.6 percent Fibonacci level before pulling back and finding support at the 61.8 percent level. But then it continued higher above the 128.67 level. With no history, how do you figure where there might be a pause? Some traders would suggest it does not matter—just keep holding the stock until it stops. But what if it stalls at 166.88, for example, a 200 percent extension of the downward movement? Should you just dump the stock there on a pullback? Maybe. But if your risk tolerance keeps you in the stock to 152.29, a pullback to the 161.8 percent extension, you may be sorry to let it go there if you did not know that it was a logical spot of support, as it did indeed then bounce back to the 200 percent level. Without an understanding of the Fibonacci level of retracement and extension, the upward levels might have seemed totally meaningless and random.

FIGURE 5.4 Goldman Sachs with Fibonacci Extensions

I do not expect you to draw nested Fibonaccis on every chart. Oftentimes it is obvious that the current trend is strong and moving beyond the full retracement zone. In that case knowing where the next pause point might be can be useful, but it does not need to clutter the chart. You can probably see that if you were to add Fibonaccis for every move up and down and keep them on the chart you could eventually make a case for support or resistance at every penny in a consolidating stock. Some traders thrive on this. I do not. Keeping the picture clear with only those Fibonaccis that pertain to my time frame helps that. What exactly does that mean? If I am looking for a $10 move in a stock and the last up or down move was only $2 in full, then the Fibonaccis from that move will be irrelevant. Additionally, if the move between the 38.2 percent Fibonacci and the 50 percent Fibonacci is $30 around my $10 anticipated move, then I also do not care. Fibonaccis add another layer of texture to the technical mosaic we have been building.

But there is more to Fibonaccis than this. Fibonacci numbers and ratios are the basis for Elliott Wave principles and Harmonic patterns as well. I urge you to continue to learn more about their derivation and application. For now, though, it is important to understand that at these key ratios support or resistance is more likely to take hold, and as price breaks these levels it has more room to move until it approaches the next level. Lock in your brain the 23.6 percent, 38.2 percent, 50 percent, 61.8 percent, 78.6 percent, 88.6 percent, and 100 percent retracements, as well as the 113 percent, 127 percent, 138.2 percent, 150 percent, 161.8 percent, and 200 percent extensions.

Practice with them, but keep it clean.

Harmonic Trading

The Harmonic trading approach has Fibonacci ratios at its roots. It was defined by Scott M. Carney, and he shared his work with the world in three books and his website. All are excellent and give good background and examples. I urge you to seek them out and read them. For our purposes let's boil them down to a few paragraphs and concepts.

Harmonic patterns all contain one basic structure, the AB = CD. This is illustrated in the chart of 3D Systems in Figure 5.5. The concept is that there is a trend from A to B. This trend retraces to C, before a new trend moves higher to D. The retracement from B to C should be between 38.2 percent and 88.6 percent of the move from A to B. Then the move from C to D should be equal to the initial move from A to B. Immediately you can see this is not the case for this chart. The initial move from A to B was $20.50, and the retracement to C was $8.50. A 41 percent retracement fits within the parameters. But the move from C to D at $26.50 exceeds the initial $20.50 move by $6. Here is the trick. The second trend leg can extend beyond the initial leg. This chart shows leg CD as a 127 percent extension of leg AB. The second leg can have extensions of 138.2 percent or 161.8 percent or any other Fibonacci extension as well.

FIGURE 5.5 3D Systems AB = CD Pattern

The takeaway is when you see an AB = CD pattern building to use the initial leg as a primary target and allow that it can extend. These patterns can repeat several times as well. If you were to relabel the move from C to D as A to B, and then look at the pullback to the 27.60 area as point C, a new point D could be targeted at 54.10 on a pure AB = CD. Harmonic patterns also give an estimate of time to achieve the target. The rule is to assume that the time it took for the first leg up will be repeated in the second leg higher. In this example that would project that point D would be hit in July. Obviously it happened in January, well before that. It can also take a lot longer. That brings in a second rule, that the price target is more important than the time target.

Harmonic patterns use Fibonacci ratios, and they appear in the price action regularly—more so than you might think. The most important ratios for Harmonics are the 0.618 and 1.618 ratios, or phi, the Golden Ratio from Fibonacci. The primary derived ratios from these, then, are 0.786, 0.886, 1.13, and 1.27. These are the square root and fourth root of the primary ratios 0.618 and 1.618. Finally, the complementary derived ratios are 0.382, 0.50, 0.707, 1.41, 2.00, 2.24, 2.618, 3.14, and 3.618. Again, there are a lot of numbers and ratios to remember, but don't worry. The theory behind these numbers is laid out eloquently elsewhere and so are the details and subtleties of the patterns. We will look at some examples and then highlight ideas as to how to employ them in your technical review of the individual charts.

The broader Harmonic structure actually starts with the leg before the A to B leg. This ends up making a five-point pattern. This is labeled the X to A leg. Including this leg, Carney has developed nine basic patterns and they all have cool names: Bat, Gartley, Crab, Deep Crab, Butterfly, Shark, Three Drives, and 5-0, to supplement the boring AB = CD pattern. With this extra leg they all resemble a type of "W" on the chart, but none have the bottoms of the W at the same spot. There are no double bottoms in Harmonics. If it is a true double-bottomed W or double-topped M, then do not look to Harmonics. Also, there are only two exceptions where the second bottom is lower than the first, the Shark and the 5-0. The differences in each pattern come from the depth of the retracements and then the new trends. All can be used to identify two types of trades, continuation and reversal. The continuation comes from the completion of the fourth leg, from B to C, and a reversal giving a projection to finish the pattern at D. The reversal trade comes after reaching D at what is called the potential reversal zone (PRZ). A move retracing back through the entire PRZ via a terminal price bar gives a reversal target for the entire pattern. The first target will be a move retracing 38.2 percent on the entire span of

the pattern, followed by a secondary target of a 61.8 percent retracement. I know it sounds complicated, but it is not really. First look for the W formed or forming, and take it from there. Let's look at a few examples.

The Three Drives pattern is the simplest and shows up in the chart of Wells Fargo in Figure 5.6. Here, note that the peaks are equidistant in a Harmonic ratio, in this case 127 percent apart, and happen at equal time intervals. This is a precursor to a reversal lower, as you can see happened in the chart.

FIGURE 5.6 Wells Fargo—Three Drives

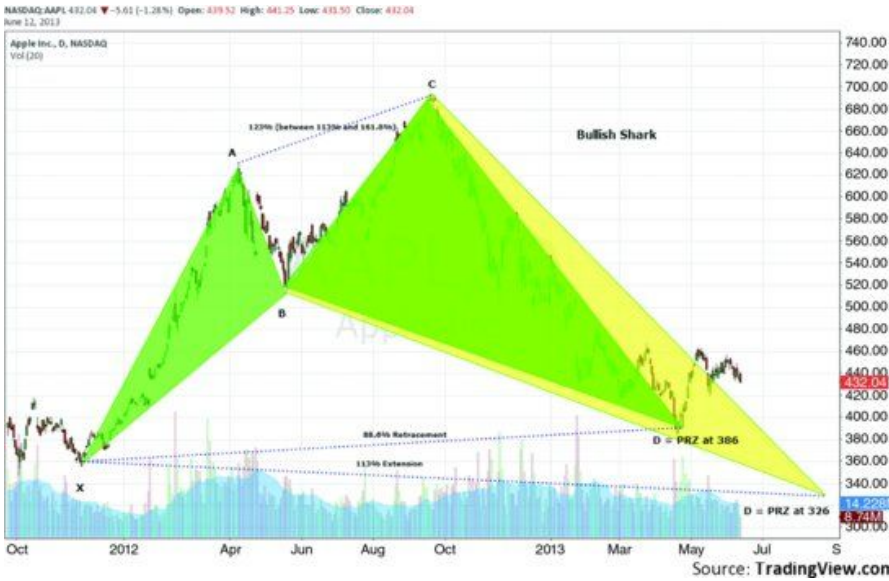
The next example is a Bearish Butterfly in the chart of Occidental Petroleum in Figure 5.7. Notice that the pattern started in September 2012 at X and ran down to A in early December. From there it retraced 78.6 percent higher (defining the Butterfly) to B in February. A retracement lower to C in April was then followed by a target of a move higher to D at 127 percent of the leg X to A. So after confirming a reverse back higher at C at a price of about 77, it had a target higher of over 96. Can you make out the W? It is the XABCD. That is a move worth owning, don't you think? You can also see that it is reinforced by the Inverse Head and Shoulders pattern, with C as the head. That gives a price objective of 91 when confirmed over the neckline at 84. This, then, becomes a very strong pattern, as two different types of technical analysis both give extreme moves as targets in a trend—the mosaic we have been talking about. The pattern has not quite made it to the PRZ at this time, reaching only a 113 percent extension, but

was still a good one to follow. It could still continue higher and achieve the PRZ. Carney called this a bearish pattern because it was meant to confirm a reversal lower after hitting point D. If for a moment you can pretend it did hit 96.70 before reversing, then the 38.2 percent initial price objective (IPO) would be measured against the range from 70.80 to 96.70 or $25.90. This would call for a pullback of $9.90 at 38.2 percent or $16 at 61.8 percent of the range. These are also major moves worth catching.

FIGURE 5.7 Occidental Petroleum—Bearish Butterfly

The third example is of a Bullish Shark in the chart of Apple in Figure 5.8. It has the X to A leg before a pullback to B, followed by a move higher to C that defines the Shark. This is defined with C extending somewhere between 113 percent and 161.8 percent of the A to B leg higher. This pattern then gives a target lower to either an 88.6 percent retracement of the X to A leg at 386 in this example, or a 113 percent extension of the X to A leg or to 326. So far it looks like the shorter target was working, as the price reversed higher. The 38.2 percent reversal higher of the range would be measured from the 355 low at X to the 693 high at C for a move of 129 higher from X up to 484. Above that carries the 61.8 percent retracement to 564.

FIGURE 5.8 Apple—Bullish Shark



Next, the chart of Blue Nile in Figure 5.9 is showing a completed Bearish Gartley. In this pattern the X to A retracement in leg A to B is 61.8 percent and the final move higher targets a PRZ 78.6 percent of the length of the X to A move. This is to 37.79. The price reached this level and moved higher but what is key is that it then moved back through the PRZ in a terminal price bar that moved through the PRZ lower. The initial target of a 38.2 percent retracement was met at 36.03 and then it bounced. This Bearish Gartley held true to form.

FIGURE 5.9 Blue Nile—Bearish Gartley

One that has been fairly rare in my review of Harmonics is the 5-0 pattern. It is illustrated perfectly by the chart of Tableau Software in Figure 5.10. This pattern sees a run-up into it, a pullback to point A, and then a rise to point B. The key then is that point C is at least a 113 percent and no more than a 161.8 percent extension of the AB move. The move to point D then must be at least 161.8 percent of the BC leg and no more than 224 percent. Upon hitting this level, the move lower should retrace 50 percent of the CD leg. A reversal at that point can be bought to move higher. Whoa (wait until you see the Wyckoff method).

FIGURE 5.10 Tableau Software—5-0 Pattern

The chart of Fresh Market in Figure 5.11 shows an example of a Deep Crab Harmonic. In this pattern the initial retracement of the XA leg was a very deep 88.6 percent. It gave a PRZ that was a 161.8 percent extension of the XA leg, to 56.10 in this case. Upon achieving that level, the stock price moved lower through the terminal price bar and met the initial retracement target at 38.2 percent of the pattern at 53.62. But it only stalled there as it waited to continue lower after reporting earnings, for a full retracement of the move.

FIGURE 5.11 The Fresh Market—Deep Crab Harmonic

A variation of the Deep Crab is the Crab pattern. It is different in that it retraces only about 61.8 percent of the XA leg but carries the same PRZ at a 161.8 percent extension of that leg. This example, the chart of Frontier Communications in Figure 5.12 shows that the price moved beyond the PRZ and then retraced back through it, eventually coming near the 38.2 percent retracement of the pattern.

FIGURE 5.12 Frontier Communications—Crab Pattern

The final example is a Bearish Bat in the chart of Cummins in

Figure 5.13. The W is a bit more prominent in this one as the requirement for the Bat is that the A to B retracement of the X to A leg is 50 percent. This gives a target for D at 88.6 percent of the X to A leg for a PRZ at 121.72. This is almost exactly where it reversed. The 38.2 percent retracement of the pattern was then achieved in late April. For the Bat it is also interesting to note that another pattern, the Crab, can look identical. If the price moves beyond the D for the Bat at 88.6 percent of the X to A move, then the Crab kicks in with a target at 161.8 percent of the X to A move. This is very bullish and something to look out for when the C to D leg starts to exceed the X to A leg.

FIGURE 5.13 Cummins—Bearish Bat

Learning Harmonic patterns will have you seeing them everywhere in the charts. Often they come back-to-back or embedded within larger Harmonic patterns. Each of these patterns can also extend, like the initial AB = CD example, so the PRZ is the initial target on a move. Look for the W and then pull out your cheat sheet. And remember that the second bottom of the W (or top of the M) is higher in seven of the nine patterns and lower in two of them, but it is never flat. If it is a flat W, look beyond Harmonics.

Recall that there are two times when these patterns are interesting. The first is when the C point is confirmed and the new trend moves back above the B point. At that point it is safe to trade the Harmonic in the trend direction to at least the PRZ. The second instance is when the PRZ has been achieved. At that point it is time to look for the terminal price bar driving back through the PRZ to trade the reversal

to at least an initial target of 38.2 percent of the full pattern move.

It will take a long time to get comfortable with whether the 50 percent retracement goes with the 78.6 percent or 88.6 percent or even 161.8 percent extension of the initial leg. I suggest you keep a notebook or website bookmarked as a reference. Spend your time looking for the not-so-level W patterns, and then measure them to determine which Harmonic it might be. Did you notice that all of the retracement and extension levels are Fibonacci ratios? That is not an accident. You are looking at the actual price action now. These ratios are truly prevalent in nature and pleasing to the trader as well. Harmonic patterns are another important piece to building our mosaic because of the potential for a long-trending move or reversal. When they complement another analysis they become even more important.

Elliott Wave

Trading using Elliott Wave analysis also requires an understanding of Fibonacci levels. The Wave principle discovered by Ralph Nelson Elliott in the 1930s has at its core that prices move in waves. These are most commonly packed in three- or five-wave patterns and can be either motive (in the direction of the trend) or corrective (against the trend). Each five-wave pattern consists of three waves in the direction of the trend alternating with two waves that are corrective. So in an uptrend a motive wave would have an up-down-up-down-up structure. That sounds like a lot of choppy markets, right? The difference is that the up waves are longer than the down waves. In fact the "down" waves can be sideways. The five-wave motive pattern is expected to be followed by a three-wave corrective move: two waves in the direction of the correction with one wave in between moving in the opposite direction. And then the cycle repeats.

Elliott Wave principles take a lot of practice to trade as a stand-alone system. Many traders are scared of them because there are a lot of rules, and the best practitioners are not always transparent about how they interpret a wave count, as they are called. In fact most, if not all, Elliott Wave traders keep both a bullish and a bearish count at the same time. But Elliott Wave principles do have value even for the novice trader. I find that they are very helpful in forecasting the extent of a potential trend, either major or minor. Like Harmonics, this is the other major form that gives a projection in both price and time. It will take a long time to learn all of the nuances of Elliott Wave principles. But knowing them can give you that extra leg up.

A few principles that are worth learning are regarding the personalities of the waves. Wave 1 is part of a basing process at least half the time and should see rising volume. Wave 2 often retraces most but not all of Wave 1. Wave 3 is the powerhouse. It is often the longest wave and shows a clearly defined trend. It also cannot be the shortest impulse wave. Wave 4 should differ in form from Wave 2. So if Wave 2 is a deep corrective move, then Wave 4 might be more sideways. It also must not retrace all of Wave 3. Wave 5 is less dynamic than Wave 3. Knowing the nuances—like the third wave cannot be the shortest wave, and looking for a flat corrective wave after a down corrective wave—can help in determining the extent of a move. Frost and Prechter's Elliott Wave Principle is the definitive read to get educated in this method, and it has a great chapter on Fibonacci and his work. I highly recommend it. As for the practicality of Elliott Wave analysis for our purposes, stick to the obvious patterns that give

you a reinforcement of other methods until you become comfortable. Use Elliott Wave analysis to understand the major extent of possible moves.

Andrews' Pitchfork

The Andrews' Pitchfork was introduced in Chapter 1 as a tool for identifying the trend. Recall that the lower median line, median line, and upper median line define the pitchfork. As the price moves away from one of the median lines it is thought that it will be attracted back to it up until the point where it gets beyond midway to the next median line. It can also be used as a trade entry tool.

The chart of Anheuser-Busch InBev in Figure 5.14 is a useful example, but first we must introduce the Hagopian Trigger Line. This line, drawn from the base of the pitchfork tangent to the break-off point for the tines, is the key to trade entry. Although the upper, lower, and median lines create bounds for the trend, price can still leak outside of those bounds. It is when the price moves outside of the upper and lower median lines and then past the Hagopian Trigger Line that a new trend can be relied on. Other methods of technical analysis may have signaled a reversal before this, but it can often add weight to the direction change.

FIGURE 5.14 Anheuser-Busch InBev—Andrews' Pitchfork with Hagopian Trigger Lines

In the Anheuser-Busch chart, in June 2013 price has already broken below the lower median line. But you can see that this

happened before, in February 2013. Back then it was quickly pulled back higher. The last move lower seems to be more telling but also has not yet broken below the Hagopian Trigger Line, so the trend is still higher from this analysis. Even if you have a signal from another methodology that the trend has changed, this new signal can accelerate the move. We have discussed the move lower, but the two breakouts to the upside that were sucked back in are also examples of the Hagopian Trigger Line containing the breakout and thus denying a trend change.

Point and Figure, Gann, and Wyckoff

There are many other methods of technical analysis employed by technicians. It is good to be aware of them even if you do not have expertise in these styles. Some have pieces that are easy to pick up and can add a little bit to that mosaic. The three listed here are not necessarily the most popular but give some broad perspective of what else is out there. These are each very different. I find that they are not as useful for a shorter time frame but can give a longer-term compass direction.

The first one, point and figure, is likely the oldest Western technique. It started with traders plotting an X (for up) or an O (for down) based on daily price movements taken from the ticker tape. There has been much analysis done through the years to read patterns and breakouts to use this tick data to give price objectives. Fortunately for all of us, there are charting programs that can give a point and figure price objective instantly and for free. It is a fascinating science, and I suggest you learn more but take the free information for now as a guide. If there is a price objective that is far above your target in a stock that is trending higher, that can reinforce your view. If the price object has already been met and your analysis is calling for a continued move higher, or if the price objective is lower than the current price, you might want to double-check your work. It does not mean that you are wrong, but it does say that there are traders who are betting against you.

The work of W. D. Gann is a bit further out there for some. His Gann angles are said to combine geometry, astronomy, astrology, and ancient math to help find what he called the derivative of a line on a chart. Okay. There are many disciples of Gann, so regardless of what you make of it, the Gann method becomes relevant for that reason. The piece that is easiest for me to use and understand is similar to a combination of the Andrews' Pitchfork and Fibonacci Fan Lines (projecting a Fibonacci ratio of a move from A to B out in time). Gann angles use a series of lines labeled 4/1, 3/1, 2/1, 1/1, 1/2, 1/3, 1/4, emanating from an important point to guide where future price action would head. The numbers refer to units of time and price, and the most important one is the 1/1 line, where one unit of time equals one unit of price. This creates a 45° angle on a chart. Most of the price action is supposed to stay between the 2/1 and 1/2 lines, creating a cone for the price to travel. I like to look at the lines as similar to the upper and lower median lines of the Andrews' Pitchfork, providing support and resistance as well as attracting price back on a

breakthrough.

Finally, there is the Wyckoff method. This method posits that there are four trends: the immediate, short-term, intermediate, and long-term. When price is aligned in each time frame, it has the strongest movement potential. Sounds simple, right? If you take one thing away from Wyckoff, make it that. The implementation becomes a lot more complex, and there are dozens of books and even a university course on it. Look to one of them for more information, not me.

Conclusion

That concludes the direct analysis of the price action. This chapter has focused on the natural flow of markets using many techniques. The most prevalent are derived from Fibonacci analysis. Using Fibonacci retracements and extensions, you should now be able to identify possible price targets and resistance and support areas that may not appear through classical technical analysis.

Two systems built on the back of Fibonacci analysis, Harmonic trading and Elliott Wave principles, can also give points of potential resistance and support with price extension targets. But in addition they give possible scenarios for reversal targets based on the natural flow of price action. You should be able to identify the W that is prominent in Harmonic patterns to allow you to pursue more detailed analysis. From the discussion on Andrews' Pitchfork, you should be able to identify the Hagopian Trigger Line and how it is used as a confirmation of change of direction of a stock price, outside of the median lines.

You should also be aware that there are many other forms of technical analysis that can influence the price action in a stock. Some are very complex, like Gann analysis and the Wyckoff method, and some are simple, like point and figure charts. Each has pieces of the analysis that can be quickly incorporated into your building mosaic. Looking back to our initial trend discovery in Part I, there are many derivatives of price that are useful in determining the broad trend and the risks to it. These are equally applicable to individual stocks. This is our next step.

Price Derivatives, Momentum, and Other Indicators

There are several types of indicators that derive from the direct price action. We discussed some previously in the determination of the major trend. In this chapter we will dig deeper into the main groups of these derived indicators. Most of these are relatively new, from the 1970s or so, as the development of computers has led to easier calculations. Specifically looking at the momentum indicators and oscillators, volatility, and moving averages as a foundation, we will see how they can help in identifying strength and weakness as well as trading opportunities in individual stocks. We will use the big guns—Relative Strength Index (RSI), moving average convergence/divergence (MACD) indicator, Bollinger bands, and moving averages—to establish a baseline. But there are many derivatives of these that can be used to tweak the perspective. Let's look at each of these granddaddy indicators in more detail and with an eye toward how they can both signal an entry and confirm another indicator.

Relative Strength Index (RSI)

The Relative Strength Index (RSI) measures momentum and moves in a range between 0 and 100. It was designed to measure the strength or weakness of a stock based on its closing prices for a recent trading period. The standard view looks at the past 14 days for swing trading charts, but many day traders use a two-day view, and longer-term traders may use a longer time frame as well. It was developed by J. Welles Wilder Jr. in the late 1970s and is really quite simple: looking at up and down closes relative to the previous day and measuring the strength of the move. The Index then compares the up days to the down days over a period of past history and equates the RSI to a scale between 0 and 100. Practitioners generally indicate the RSI as bullish over 50 and bearish when it is under 50 with an overbought condition when it is above 70 and oversold when below 30. This is as far as we got earlier. But for many it is not that simple.

The RSI is used exclusively by some traders in their work. They do this by understanding that it is a measure of momentum. Yes, some keep it simple and look at an RSI over 50 as bullish and an RSI under 50 as bearish. But the RSI can fluctuate a bit in its moves and especially between the values of 40 and 60. So, many (including myself) look to the RSI to move above 60 to confirm a bullish trend and under 40 for a bearish one. One way to look at this is that it is just being more conservative than using the midline. The importance to identifying trading opportunities is that as the RSI moves into bullish or bearish territory it can either lead a signal for a breakout or confirm one. It can also signal a trend reversal. As it turns from moving lower to rising, it can give a buy signal, and as it turns from rising to falling, a sell signal. As it is bound within the range from 0 to 100, it can be hard to see little moves and it can also move back and forth enough to confuse you. For this reason I use it mainly either to confirm the broader analysis or to raise a caution flag. There are two exceptions to this, which we will delve into.

If the broader analysis shows a rising trend but the RSI is breaking below 40, this divergence can help avoid what could be a losing trade. But when the price is basing after a pullback and the RSI is holding the 40 level, not giving up bullish territory, it can help clear up confusion in a pattern early. The chart of DuPont in Figure 6.1 is a good example. This stock had pulled back from a high near 56.50 and had an RSI that moved lower from 70 to just under 40. The trend in price lower leads one to question whether it is just a trend down or a bullish Falling Wedge. The RSI holding at 40 gives a clue that the

wedge may be in place, and price eventually did move higher, with the RSI leading the way up.

FIGURE 6.1 DuPont at RSI Support at 40

The one exception to this is when the RSI reaches an extreme level. When it is under 15 or over 85, the RSI signals an extreme case in momentum. These extremes can be trade signals for a reversal on their own. The chart of Ironwood Pharmaceuticals in Figure 6.2 shows two times in the first half of 2013 that the RSI moved into technically overbought territory and over 80. The first time, it reached 82, and the second time, 93. These extreme readings give a signal to look for a reversal in the RSI. This can happen by the price moving sideways or falling, so there is not a guarantee for a profitable trade. The signal from an extreme RSI is to watch the price action for a reversal. In this example, the candlesticks were also signaling the potential for a reversal with two Spinning Tops (dojis with long upper and lower shadows) in the first one and a very long upper shadow on the second. Both eventually moved lower with confirmation of the RSI falling and made for excellent short opportunities.

FIGURE 6.2 Ironwood Pharmaceuticals—RSI Overbought

But there is also an old trader adage that goes: just because a stock is overbought (or oversold) does not mean it cannot get more overbought (or oversold). The chart of Aeropostale in Figure 6.3 is a good example on the oversold side. From the time it became technically oversold with the RSI breaking below 30, price continued to drop another 33 percent and was still running at extreme levels when this was written. All oversold and overbought conditions will eventually work themselves off through either time or a reversal in price. But how long do you want to wait? The correct answer is to look for the reversal in the price after the oversold/overbought extreme before placing a trade. Keep these extreme RSI trades on your radar; just do not pull the trigger until they have confirmed a reversal.

FIGURE 6.3 Aeropostale—RSI Oversold

The other exception is for something called an RSI positive/negative reversal. An RSI positive reversal occurs when the RSI makes a new lower low in an uptrend while the stock price does not make a lower low. This technical setup targets a rebound higher in the stock price that makes a new higher high and is equivalent to the last move higher off of the RSI low. This is very similar to a measured move higher out of a pattern. This happened twice in three months in Chevron in Figure 6.4. You can see the first time that the rebound made a new high but did not move the full 13.27 points of the prior move, but still almost 90 percent of it. It then made a new lower low in the RSI on August 21 without the price making a new lower low. If this positive RSI reversal plays out, it would target at least 127.84 and look for a move to 129.11, equivalent to the last move higher. The symmetry of the last two moves also suggests that it should happen in four to five weeks from the bottom or between September 25 and October 2.

FIGURE 6.4 Chevron—RSI Positive Reversal

There are many other methods of trading using RSI, and several books have been written on the indicator. You can apply classical technical analysis chart patterns to the RSI—for example, looking for support and resistance breaks and things like a Head and Shoulders pattern. You just need to keep in mind that RSI is bounded by 0 and 100 and a move to either extreme takes a lot of momentum. Take some free time to dig deeper into this indicator.

Moving Average Convergence/ Divergence (MACD) Indicator

The moving average convergence/divergence (MACD) indicator, developed by Gerald Appel in the 1970s, also measures the strength of the trend but is not bounded into an index like RSI. It instead looks at both a shorter and a longer momentum indicator, the exponential moving average (EMA; more later) and compares how they move relative to each other. Think of MACD as a measurement of fast momentum compared to slower momentum. It can be plotted two ways. The first is showing two lines, one being the faster versus the slower momentum or the difference between the EMAs, and the second line being a smoothing mechanism of that line and known as the signal line. The first line, called the MACD line, is typically created by subtracting the 26-period EMA (the slow momentum) from the 12-period EMA (the fast momentum). The signal line is typically the nine-period EMA off that MACD line.

There are also several ways to use it as an indication of a potential trade setup. We discussed earlier in Part I that a rising signal line indicates a rising trend and a falling signal line a falling trend. Traders will also use a crossover to indicate a change in trend and a possible trade. When the MACD line crosses the signal line, it is a signal to trade. A cross up is a buy and a cross down is a sell. Traders will also look at the relative value on the MACD line compared to previous highs or lows to indicate a potential for momentum to end soon. Finally, the MACD line crossing the zero level is another indicator that the 12- and 26-period EMAs are crossing, showing momentum either picking up or declining. Each of these three signals can be used to trade on its own.

The MACD histogram is much simpler. If it is growing, it is an indication that the components decrease in the relative momentum on a falling trend. The cross at the zero level indicates a cross of the two components. Another method of trading is to buy the cross up and sell the fall off the peak of the histogram, or sell the cross down and cover the short as the histogram starts to improve. These will not always line up precisely with the price action at turning points so they can give a signal before a move.

The chart of Electronic Arts in Figure 6.5 is a good one to illustrate the trade signal on a signal line crossover. It shows seven sell signals indicated by the arrows in the top half of the MACD panel where the MACD line crossed down through the signal line, each corresponding

to a fall in price. Notice that the histogram also changes from positive to negative at these turning points. The histogram can also sometimes be used as a leading indicator of a change in trend as well when it starts to fall back from an extreme value toward the zero line. In the example this happens as the MACD line is starting to turn back but before the crossover signaling a change in trend. There are also four buy signals indicated by the arrows in the lower half of the MACD panel where the MACD line is crossing up through the signal line. In each of these the histogram also moves from negative to positive.

FIGURE 6.5 Electronic Arts—MACD Signal Line Crosses

Traders also use the MACD indicator to point out possible changes in momentum that do not appear in the stock chart. They will look at whether the MACD line is moving in the same direction or diverging from the price data. A divergence is seen as a possible trend reversal indicator. The chart of American Capital Agency in Figure 6.6 shows how you can use MACD with price to look for a potential move. As the price was falling from the peak in early May, the MACD line was also falling. The MACD line leveled slightly before the price did, but what is of interest is that the MACD line started higher in early July and has not looked back, yet the price has just been consolidating. This divergence would have a trader looking for a move higher out of consolidation in the price to follow the MACD line higher. In this manner the MACD is not used as a trade signal but to highlight a potential opportunity that can be confirmed in the price. Without a look at the MACD, the price action in the box in American Capital Agency could be interpreted as a bear flag or a possible double

bottom. The MACD divergence switches the review from two-sided to the upside.

FIGURE 6.6 American Capital Agency—MACD Divergence

The MACD indicator is a widely used and explored indicator, with only the surface touched in these paragraphs. Like the RSI, using it to confirm other analysis is a good way to start. When there is a divergence, it should raise a red flag or highlight a potential opportunity on the broad analysis.

Bollinger Bands

The Bollinger bands are a measure of volatility around the price action. They were named after John Bollinger, who developed them in the early 1980s. They consist of three curves around the price action, known as the upper band, middle band, and lower band. The middle band is a smoothed price action chart, quite often the 20-day simple moving average. The upper and lower bands are the standard deviation of the middle band. In this way they create a tube around price that expands and contracts as volatility in the price action changes. Such a movement through the Bollinger bands can signal an overbought or oversold condition by itself, as an extension beyond a standard deviation of price action. In the chart of Callaway Golf in Figure 6.7 there are five buy arrows below and five sell arrows above in just an eight-month period using the break of the upper or lower Bollinger band as a trading signal. The technical signal is the price breaking through or touching the upper or lower Bollinger band. I use a breakthrough and then a retracement back inside. You can see from the signals that even with a tight trailing stop each would have led to a sizable gain despite the stock moving mainly sideways in a broad channel.

FIGURE 6.7 Callaway Golf—Bollinger Bands

Bollinger bands can also be read by looking for relative changes in them. For example, you can look for them moving from a wide to

narrow zone. Bollinger band squeezes, where they get very narrow, can signal powerful moves to come in a stock. The chart of JPMorgan in Figure 6.8 illustrates this. After a relatively steady range in the Bollinger bands from July through August 2012, the Bollinger bands got much tighter around the price as volatility moved out of the stock. The bands were squeezing the price action. This resulted in the price popping higher for a 10 percent run-up, before they started to collapse again. Look for these squeezes as a potential moving point for a stock. In JPMorgan, the price action had also been consolidating for some time. Most traders would see a possible move triggered out of the consolidation, but the squeeze in the Bollinger bands puts some imminent timing around it.

FIGURE 6.8 JPMorgan—Bollinger Band Squeeze

One final thing to look for with Bollinger bands is how they tend for the most part to act as support and resistance. You do not need to look for a bounce off a Bollinger upper or lower band or a break and retracement alone; they can also be useful to indicate that a trend can continue as the price is not near the Bollinger band, or even if it is near it, the band it is following is opening to allow for a run or continued trend. This can be seen in that same JPMorgan chart from December through the end of January as the price rises along the upper Bollinger band.

There are many other variants of the volatility measure, like the Average True Range (ATR), Keltner Channels, and straight volatility bands as well, that can be used to measure the same thing. And the

work in this area of volatility is some of the most interesting in the current era. What you need to keep in mind is that changes in volatility can often signal a change of character in a stock or show an extreme move.

Moving Averages

The use of moving averages was discussed in Chapter 1, about identifying the trend. There we learned that a simple check is to see if the price is above or below the moving average and the direction of that moving average, up or down, to identify and confirm the trend. This applies to individual stocks as well. But there is a lot more that can be said about moving averages. They can act as support and resistance like trend lines and horizontal lines. Traders tend to focus on the 20-, 50-, 100-, and 200-day moving averages for swing trading (holding a few days to a couple of weeks). But some will swear by the 144-day, since it is a Fibonacci number, or the five- or nine-day if they are very short-term traders. Moving averages can be used on any time frame as well. A day trader might look at the 20-period moving average on a five-minute chart whereas longer-term holders may refer to the 20-week (very close to the 100-day) moving average.

These moving averages can be simple or exponential, referring to how they are calculated. Simple moving averages (SMAs) use an arithmetic average of the stock prices, but which ones? Opening, closing, high, low, or average? Most traders and investors presume the closing price to be the most important and use this as the default for calculating a moving average, even if it is for an intraday period. So a 100-day SMA is just an average of the past 100 days of prices. The exponential version (EMA) gives greater weight to the more recent prices than it does to the older prices. In this way it reacts to price changes faster. Traders use 9-, 12-, and 26-day EMAs most often to trade from. Remember that the latter two are also used to create the MACD indicator. To me, if you want the moving average to react faster, then you should just use a shorter time period for your calculation on an SMA rather than using an EMA.

I use the 20-, 50-, 100-, and 200-day SMA on my charts. Depending on the strength of the trend and the particular stock, some can be more useful than others. The chart of Burger King Worldwide in Figure 6.9 is a good example of how they can be used to trade from. Notice that over its short life since exiting bankruptcy, it has bounced off of the 100-day SMA four times. Each time provided a long trade opportunity, three of them good for more than a 15 percent move.

FIGURE 6.9 Burger King Worldwide—Moving Average Support

The chart of JPMorgan in Figure 6.10 is another example of the 100-day SMA acting as support. Here there are also four touches that signaled a reversal back higher. But this example also illustrates the point from the Part I trend identification. The first move over the 100-day SMA in September 2012 was a signal to buy the stock as the trend change was confirmed with the move above the SMA. To generalize, when the price comes back to an SMA that has shown significance (or any of the 50-, 100-, or 20-day SMAs) and then reverses, it can be a trade entry signal, either long or short.

FIGURE 6.10 JPMorgan—Moving Average Support

There are other signals from the SMA as well when the moving averages cross. Recall that this is the basis for the MACD indicator, but it is a useful tool on the price chart as well. Two of the more popular are the Golden Cross and the Death Cross. A Golden Cross is when the 50-day SMA crosses up through the 200-day SMA, and a Death Cross is when the 50-day SMA crosses down through the 200-day SMA. As the names may suggest, a Golden Cross is supposed to confirm a trend change to bullish whereas a Death Cross confirms a trend change lower. These can be useful sometimes but have drawbacks.

The chart of Diebold in Figure 6.11 is useful in illustrating many of these points. There are five of these crosses in the chart. Let's walk through them. The first is a Golden Cross highlighted in the small oval in October 2010. Notice that the angle of intersection of the two SMAs is relatively steep. When it is steep, the cross carries more weight. This is because it shows a strong trend in the shorter 50-day SMA. But this also shows the drawback for a short-term trader in using this as a signal; the price had already moved up 25 percent when the Golden Cross occurred. The second cross, a Death Cross, has a good angle of intersection, nearly perpendicular. But the price had already dropped 18 percent to 28 and was in fact moving back higher when the cross occurred. It did continue back lower, giving more downside then. The third cross is another Golden Cross, but at a very shallow angle. These are often not as reliable, and you see it was not until the 50-day SMA started a steep climb that price started higher. The fourth, another Death Cross, came at a steep angle and moved much lower, but the price had already dropped 23 percent and was rising back to meet

those SMAs when it triggered. The final cross is a Golden Cross, again after a move higher of 16 percent.

FIGURE 6.11 Diebold—Moving Average Crosses

You get the picture: Golden and Death Crosses can confirm that a trend has changed, but they are not good signals alone to trade from. Know where they are so that you do not trade against them, but use them to complement other analysis. Closing out this example, the last Golden Cross is happening as the price is moving out of consolidation in a channel and over horizontal resistance. In this way it confirms an entry on the breakout, a sneak peak of things to come later.

One final point to highlight with SMAs is that sometimes the SMA can give a heads-up for a move when they just get close together. The confluence of the 50-, 100-, and 200-day SMAs in the chart for Aeropostale in Figure 6.12 illustrates this. The two ovals show points where the three SMAs moved together and shortly afterward a major move in the stock occurred (to the downside in this case).

FIGURE 6.12 Aeropostale—Moving Average Confluences

It is okay to experiment with your own adjustments to the moving averages to see if you can get an edge outside of the basic 50-, 100-, and 200-day SMAs. Just be aware which are the most popular and are the standard defaults for charting packages. Most people will not change the defaults, so these become important for that reason alone.

Conclusion

This chapter could not have been written in the 1960s. First, because I was just a boy, but more importantly because the tools needed to create these indicators require computing power that was not available then. The four tools explored derive from price data, not with overly complex calculations, but complex enough that only firms with an army of analysts could do the calculations outside of just a few indexes back then. That is a good thing for traders who think that all systems eventually get arbitraged away. These newer tools (if you can consider 30 to 40 years "new") are not as broadly employed and may still have some edge.

We just scratched the surface in each, but there are many characteristics that you should be able to add to your analysis in determining the right securities to trade. From the RSI you should now be able to identify when RSI confirms a trend and overbought and oversold conditions in a stock so that you can protect positions at the right time. You should also be able to identify extreme overbought and oversold conditions and look for a reversal trade opportunity. Finally, you should be able to recognize a positive or negative RSI reversal and be able to calculate the potential move.

From the MACD you should now be able to identify potential trade opportunities from a signal line cross as well as from the histogram. You should also be able to recognize when the MACD is diverging from price and may be a leading indicator of a potential reversal in trend, thus providing a trade opportunity.

From the Bollinger bands analysis you should be able to recognize potential support and resistance levels using the upper and lower Bollinger bands, as well as be able to identify potential trade opportunities from a reversal when the price exceeds these bands. You should also be able to recognize when the Bollinger bands are leading a trend higher and when they are squeezing, creating a possible trade opportunity.

Finally, from the review of moving averages you should be able to identify strength in a stock when it is above the moving average as well as the potential for support and resistance that the moving averages provide. You should be aware that moving average crosses can be a point of action, but the most talked about, the Golden Cross and the Death Cross, may be lagging indicators. You should also now know to look for a potential stock price move around a confluence of multiple moving averages.

These indicators can be used both to confirm what you see with

classical technical analysis and standing alone to look for trading opportunities. Each has many derivatives or, as I like to say, flavors that you can choose from. Definitely experiment to see what works for you. But at the end of the analysis, remember that it is price that is most important, not the indicators, until you can directly trade an indicator on an exchange. Add these to your tool belt to create your total stock mosaic.

The Watch List and Initial Plan

The critical groundwork has now been laid. You now know how to identify the trend and all of the things that could change it. You can drill down to discern which sectors are best suited to follow the trend to look for individual stock setups. And finally, using several different types of technical analysis tools from classical technical analysis, Japanese candlestick techniques, derived and quantitative methods, and price derivatives, you can review individual charts for characteristics that would make for a good stock trade. You may find five or 50 stocks or more that fit the criteria of reward potential. Recall that we are looking for stock setups that can potentially return 5 to10 percent or more in two weeks or less for the technical setup. But now what? In this chapter you will learn how to put it all together into a watch list and an initial plan for trading. There are a few nontechnical pieces of information to review for your stocks, and then the list should be culled to be able to focus on a select list of a few names. From that point we will focus on creating a trading plan. At the end of this chapter you should be ready to trade stocks.

Create the Mosaic

The best setups for a trade have several different pieces of technical analysis working to support a move. This is called building a mosaic. You can think of it as writing a song. Adding the bass to the piano makes it a little better. When the drums and horn are also working together, it is nearly complete. Add some stellar vocals and it turns into a winner. There are many different styles of technical analysis, and we touched on four of them here. It may not seem practical to look at every stock in your universe from each perspective, but as you get more practice aspects of different styles will jump out on different charts at different points in time. Remember that we started with the trend and an understanding that something close to 70 percent of stocks move with the trend. Think about what that means. If there are aspects of technical analysis that are more prevalent at a point in time in the indexes, then they stand to be more prevalent in the individual stocks that have been handpicked because they are following the trend. If the indexes are pulling back to the 100-day simple moving average (SMA) or are showing a Shark Harmonic, then you should not be surprised to see many stocks at the 100-day SMA or in a Shark pattern as well. With enough practice you will start to get a feel for whether a pullback is near a Fibonacci level, and the near W shape is an easy giveaway to look for a Harmonic.

Believe it or not, many technicians do not need to put lines on a chart to see patterns, trends, and support and resistance. As you peruse the charts with your return criteria in mind, you will recognize that the Fibonacci levels may not apply to one situation. That is okay. A setup that works with just one type of technical analysis is a good way to start. If you start with a classical approach and find a pattern ready to break, then look at the candlesticks to see if they confirm or disagree with your analysis. What about any Fibonacci or Harmonic pattern then? And if there is one, does it agree or not? What are the momentum indicators saying about the chart? The more different styles that align in your analysis, the more confident you can be in the setup. It does not mean that it will ever trigger, but wouldn't you prefer a stock that looks to be breaking an Inverse Head and Shoulders neckline higher in a Harmonic pattern with a potential reversal zone 10 percent higher that has a rising Relative Strength Index (RSI) and a Three Advancing White Soldiers candlestick pattern, rather than a stock that has just one of these things going for it?

This process of putting it all together is not intended to wipe out those stocks that have only one thing going for them. Remember that

they may have the one thing that the indexes have going for them, so that may be enough. What you do want to do, though, at this stage is to organize a few priority lists. It is difficult to watch many stocks at the same time, so putting them into groups A, B, C, D or 1, 2, 3, 4 can help. Use as the criteria a qualitative analysis of the potential move combined with the probability that it may trigger. The stock that has four different types of technical analysis working for it has a higher probability of triggering than the one with just one. A 10 percent potential move based on the combination of a Three Drives pattern and a triangle breakout as a stock is approaching the trigger with supporting RSI and moving average convergence/divergence (MACD), for example, would be ranked very high versus one with a 4 percent potential move that is 2 percent from the trigger but has good supporting technicals. You are now almost ready to trade.

Other Information

There are a few nontechnical things to review now before exposing capital to risk. First is looking for any kind of news on the company that might influence the stock. This can be fundamental news like an upcoming dividend or an earnings release, or some kind of regulatory approval like a Food and Drug Administration (FDA) panel for a pharmaceutical name. Any event that you know is coming can then be planned for.

It can also be sentiment-driving news. A good example of this was in April 2010 when BP's Deepwater Horizon platform exploded. The chart in Figure 7.1 shows that the stock was in an uptrend at the time. But no amount of good technical inputs was going to turn this stock around until some time had passed or a settlement was made. This stock just kept going lower. This can at times make it easy to take a few stocks off of your watch lists. Sentiment can play a big role in determining the direction of stock prices. There are many traders who trade almost solely off sentiment, and many great resources to learn more about its impact. This aspect applies to individual stocks, but most sentiment indicators deal with the impact to the broad market or a particular sector and not to individual stocks. This includes the Deepwater information, as well as surveys of bullish and bearish sentiment and things like the put/call ratio.

FIGURE 7.1 BP—Noting Deepwater Explosion

Finally, it is important to look at the short interest in stocks on your watch list. Whether you are trading the stock to the long or the short side, the short interest can influence your decision making. This is because when traders short a stock they are selling stock that they do not own. They need to borrow the stock to make delivery to whomever they sold it to. Your broker handles this for you, and often at a hefty fee that you probably never see. But it is important to you as you develop your watch list because it can be fuel to fire a quick run higher in the stock price. This is good if you are trading it from the long side (buying it), but can be disastrous if you are trying to short it. Every share that has been shorted must be covered at some point; you just do not know when. Often a break of resistance higher in a stock that is heavily shorted (over 10 percent for our purposes) can trigger this short covering. If the short interest is high enough and the other buyers aggressive enough, this can lead to a short squeeze.

Stocks can move very quickly in a short squeeze and to extreme levels. Tesla Motors in Figure 7.2 is a very good example happening as I was writing this book. The company released earnings on May 8, 2013. At the time over 40 percent of the float was short. As the earnings beat analyst expectations, the stock took off. It moved from $56 per share to over $112 in less than three weeks. Think about that: a 100 percent move in 14 trading days. That is a great thing if you are long but can wipe you out if you are short.

FIGURE 7.2 Tesla Motors—Short Squeeze

In general, you want to give extra weight in your consideration to

stocks with a good long setup that have high short interest. And you want to use more caution with stocks that have a good short setup that have high short interest. If the short interest is over 10 percent, then you may want to remove the stock from your watch list if it is on there for a short setup. Sometimes you may find that there is no borrowing available in a stock with a good short setup anyway so that your broker will not let you execute a short sale. In this case, drop it and move on to the next stock. There are ways to trade these using options that we will get to later in the book, but trading the stock in these names is far too risky.

With all of the news and short interest factored into your stock selection, your watch lists are now complete.

The Plan

With the watch list revised for news, sentiment, and short interest, it is time to develop the plan for each stock. The plan will include the trigger, stop loss level and how to adjust it, as well as when to reassess or take some profits. These all come from your analysis. You may be overwhelmed with 20 or 30 names at first, and you should be. Narrow the watch list to what you can manage with the time and resources you have available. If you have screen space to watch only 10 names, then your watch list should be cut to 10 names. If you can devote only an hour per day to trading and an adjustment when an alert sounds, then cut it even further or never enter more than a couple of names at a time.

But whatever the size of your watch list or available time, make sure you have a plan for each name on the list before you think about placing a trade. Without a plan, stop losses slip, emotions and biases get involved, and mistakes are made. And every mistake in the stock market gives your money to someone else. With a plan, there is no rash decision making. If a stop is hit, it executes. If a target is met, a stop is raised or profits are taken. Mistakes will still happen because you cannot plan for every outcome, but they will be fewer and farther between.

I find it best to write down my trade plans so there is no room for error. I can still tweak entries or adjust exits, but having a plan in place before I trade is the key to success. It may also help to set alerts for when the price gets close to the trigger. Some traders go even a step further and set up trades with a bracket order (a buy order with a profit limit sell and contingent stop loss all at once) to take profits and a stop loss all triggered on the initial entry. You do not have to get that mechanical, but I do suggest entering a hard stop loss after the trade is triggered. You never know when your broker or connection to the broker may go down and leave you vulnerable. If this happens, invariably the market starts to move against you.

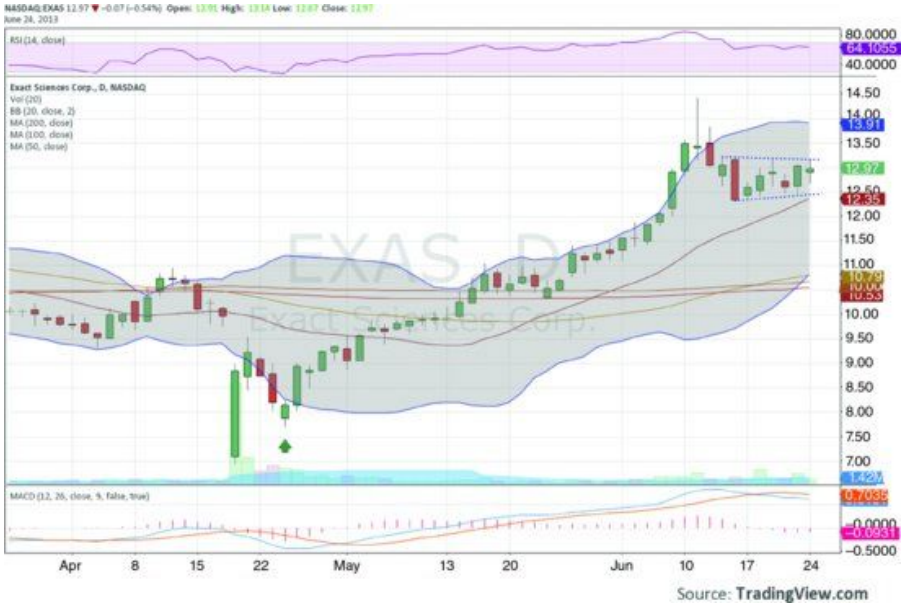
Probably the most important part of the plan is where you will determine that you are wrong—that is, where the stop loss should be placed. We will discuss in more detail later how to determine that level. For now, take it as a given that you do not trade before you know how much you are willing to lose. By having this level set before each trade is entered, you are automatically limiting your losses so that you can keep trading another day. Without it, many traders turn into investors as they let a loss progress. There is nothing wrong with being either a trader or an investor, but the only reason

you want to be both on the same trade is if the stock keeps moving the way that you have played it to move, not against you. Never let a trade that was intended to be a three- or four-day trade turn into two months or more as you wait for your great idea to turn around and work off a loss. Having the plan before you trade allows you to detach from the idea and determine ahead of time when you are wrong. If you end up getting stopped out of a trade, then so be it. You move on to the next trade setup that triggers. You want your winners to be big and your losses to be small. It is not as important to have a great winning percentage as it is to have the winners be bigger than the losers. Many successful traders have only a marginally winning record, between 50 and 60 percent, but are very good at managing risk. That means cutting the losers fast.

You cannot possibly write down all of the permutations that can happen to your trade setup through time. But with a good understanding from your technical review from multiple perspectives you can build the framework for a trade plan that protects capital and allows you to win. Another thing to keep in mind is that some days you may have no trades trigger. That is okay. You do not have to trade every day. Other days there may be 25 trades out of your 30-name watch list that trigger. This is even worse. Do not try to take all of the trades that trigger all of the time. You need to be able to remain comfortable managing the open positions. If you have too many, then mistakes start to creep in. A large part of trading is patience, otherwise known as sitting on your hands. This is about developing a process to make money, not a process to always be playing and then hoping that more trades make money than lose money. Here are a couple of trade setups from my subscriber service as examples to see how you might develop your trade plan.

Exact Sciences (EXAS) in Figure 7.3 is in a consolidation after a long run higher. Using the Morning Star at 8.00 from April 24 (see arrow) as a basing point, it has a measured move higher to 18 on a break of that consolidation to the upside. The RSI has worked off the technically overbought condition and is holding level in bullish territory, with the MACD leveling after a short pullback. Short interest at 15 percent could help it higher fast. There is resistance higher at 13.50 and then free air, with support below at 12.50 and 12 followed by 11.40 and 11 before 10.40 where all the SMAs sit. Enter long on a move over 13.20 with a stop at 12.95, or more conservatively over 13.55 with a stop at 13.30. As price moves over 14, convert the stop to a 40 cent trailing stop and take off one-third at 18, leaving the rest to run against the trailing stop. With the large short interest, I do not recommend shorting this stock under 12.50 unless you use options.

FIGURE 7.3 Exact Sciences—Trade Setup



Carrizo Oil & Gas (CRZO) in Figure 7.4 is pulling back to prior resistance and the neckline of an Inverse Head and Shoulders, now support, from a Hanging Man candle Wednesday. With a Spinning Top doji on that level, a move higher Monday could confirm another reversal back higher. This would make for a higher low, the 5th in succession after a long string of higher highs as well. The RSI is holding in bullish territory with a MACD that is moving higher to support further upside, and short interest is high at about 15 percent. There is resistance at 28.50 and 29.50 and then free air. Support lower comes at 27.50 and a gap fill at 26.89 followed by 25.90 and 23.50. Enter long on a move over Friday's high to 28.50 with a stop at 27.50. On a pullback you can also try a reversal long on a gap fill that reverses back over 27.50 with a stop at 27. As the price moves over 29 convert it to a 75 cent trailing stop and take off one-quarter at 30, leaving the rest to run against the trailing stop toward the Inverse Head and Shoulders price objective of at least 35.10.

FIGURE 7.4 Carrizo Oil & Gas—Trade Setup

TiVo (TIVO) in Figure 7.5 is in a bearish Shark Harmonic with a potential reversal zone (PRZ) at 13.60. The RSI is rising and bullish and the MACD is moving higher. There is resistance higher at 11.90 and 13.20 followed by 13.75. Support lower is found at 11.50 and 10.75 before 10.50. Enter long on a move over the 200-day SMA and 11.90 with a stop at 11.50, just under the 100-day SMA. Move the stop to break even as the stock hits 12.15 and as it moves over 12.40, closing the gap, and convert it to a 30 cent trailing stop. Take off one-third on a stall at 13.25 or higher. Short interest is a bit elevated at just under 6 percent in this name.

FIGURE 7.5 TiVo—Trade Setup

Notice that each setup incorporates the elements of technical analysis that are evident in each chart. It is not necessary and is discouraged to look at different aspects of technical analysis individually. The mosaic is much easier to create on one canvas. Each also discusses the short interest as it is at relevant levels for these names. None of the three has any news associated with it or earnings to deal with. Each plan has a trigger with a stop loss right there with it. The plan also has targets for profit taking and adjustments for protecting gains as the price moves in your direction. These examples were intended for somewhat active traders, so the trailing stop losses allow them not to have to pay as close attention as with fixed stops that would need to be adjusted. If you can monitor trades and keep stop losses to valid potential support and resistance levels, that is even better. Your plans can be as simple as this or coded notes in the margin of your trading journal. Just make sure that they exist and are concrete. Setting a stop around the 100-day SMA in my experience means you will execute it when the stock has gone three days in a row below the 100-day SMA and is 5 percent below it. Setting a stop at the 100-day SMA less 10 cents gets executed at the SMA less 10 cents.

Conclusion

You should now know how to put the whole technical package together and create a plan to trade stocks. Starting with the building of a mosaic of your technical analysis and leading to several ranked watch lists, you know that you then need to look for any known news events like earnings or major headlines that can influence your decisions about which stocks to trade. You also know that a check of the short interest can save you time and money by helping you avoid high short interest stocks that you identify setups that are biased lower and using high short interest to your advantage in stocks that look better higher. Finally, you understand the importance of writing a plan with concrete stops and targets before you trade.

That concludes the part on individual security selection. Pretty simple, right? Just look at some pictures, draw some lines, and maybe do a little adding, subtraction, and multiplication but no high math. And then glance at some headlines. As my daughter would say, easy peasy lemon squeezy. There was a lot of ground covered in this part, starting with classical technical analysis. Several thousands of pages of text have been devoted to the study of that subject alone, and we just scratched the surface.

But with the tools presented, you should be able to identify trading opportunities using support and resistance and other classic technical patterns. Through the exploration of the world of Japanese candlesticks, you should now be able to identify candlestick patterns that precede continuations and reversals, and be ready to exploit them. You should also recognize indecision candles that can foretell a move either way. With the introduction of Fibonacci-based approaches, you can now identify important points from the natural flow of stock prices that may become support and resistance, as well as identify trading opportunities when the flow presents them. You can also use indicators derived from price, like moving averages, the RSI, and MACD, as well as those derived from volatility, like Bollinger bands, to give you an edge in identifying support and resistance levels, as well as divergences and extreme readings that can lead to trade opportunities.

Combining all of these styles to create a mosaic puts the full value of your analysis in one place. This now allows you to build and rank watch lists based on their potential to perform and the aggregate of analysis backing that. From there you know to look for outside news and events that could derail your ideas. Finally, you know to look for short interest to determine if it may help or hurt your ideas. If it hurts, you might even discard some possibilities. With revised watch lists, you now can develop a plan to trade each stock. The written plan will have a trigger stop loss and target as well as some thoughts about how to adjust the plan for movements in price in your direction. You understand the importance of the plan being written so as to avoid any uncertainty.

Now you are ready to trade stocks.

But you want to trade options. In the next part we will go over some options basics and then adapt the analysis up to this point to the options market.

OPTIONS STRATEGIES

In the first part of the book we learned how to identify the trend in the major market indexes. This is important because the vast majority of stocks move in the direction of that trend. We also learned that it is important to understand what might impact that trend so we can be prepared for a possible change in the trend from an outside influence. In addition, we learned how to focus the process of trade preparation by using relative strength and other measures to determine which market sectors might be the best ones to look at for stocks that are aligned with the trend.

In the second part of the book we drilled down further, exploring many different types of technical analysis to determine which securities were best suited to trade based on their potential to have a big move. We learned where trigger points might be, based on potential reversals or support and resistance. (There will be more on how to apply this in the section on position sizing and stop losses in Chapter 10 in Part IV.) We explored the impact that news, either scheduled (like an earnings release) or a surprise (like the Gulf oil spill), can have on whether you choose a stock to trade, and how short interest can play a role in determining whether to take the trade. Leaving Part II, you were prepared to trade with a watch list and a plan for the securities on that list.

In this part we will go over some options basics so that we can then adapt all the prior analysis to design options trades. We start with some definitions and build into some strategies to get a good understanding. From there we delve into some options trading basics before we tie it all together. There are plenty of great resources that you can review to learn in depth about options, so I will not spend the time here doing so. We will cover enough that you can understand the philosophy and style without all of the minor nuances. Options

trading can be very complex, depending on your strategy. Those strategies that employ the Greeks (delta, theta, gamma, etc.) can get highly quantitative. Fortunately, they do not play a large role in our style of trading. You may have also heard of the Black-Scholes methodology for determining the fair valuation of options. It uses partial differential equations and is about as complex as it can get. You will be happy to know that has nothing to do with our process. You could say we do not care what the fair value of an option is. That is not totally true, but is a good approximation to start. I hope I have allayed your fears and you will continue to read with a slower, more steady heartbeat now. Let's get started with some simple definitions.

Introduction to Options

Derivatives are thought to be complicated and out of reach for most investors. They are considered the realm of financial engineers with degrees in astrophysics—true rocket scientists. They can indeed be very complicated, but the most basic ones are well within the reach of the general public. Exchange-traded funds (ETFs) are a great example, and so are options.

Options are derivative securities. All that means is that they derive their price from another security. In this chapter we focus on options basics. We define all of the important terms that characterize an option first. Then we discuss why options are useful and how they are different from stocks. Finally, we delve more deeply into two main building blocks of all options strategies, puts and calls. (Many of you who have a background in options may find this remedial; for others it may be a good refresher, or you may want to just skip to Chapter 9 on options combinations.) By the end of this chapter you should be able to understand and recognize the data in options tables. You should also know why options are useful for our trades and the basics of puts and calls.

Definitions

Options, aside from being a derivative, are also a contract. The contract has many standardized features. First is that it gives the holder, or buyer, the right, but not the obligation, to buy or sell a security at a predetermined price in the future. That price is called the strike price. A call conveys the right to buy a stock, and a put conveys the right to sell a stock. Puts and calls are the building blocks we will use to build trades and manage risk with our individual stock trade setups. Like transactions in the stock market, there is a seller for every buyer. The seller of an option, however, has the obligation to transact if the buyer chooses to use the option. This happens if the holder exercises the option. For a call option, the buyer owns the right to buy the stock at the strike price at a date in the future. The seller of the call option is obligated to sell the stock to the call buyer at the strike price if the buyer does exercise the right to buy. This is known as being called. The seller of a put option has the obligation to buy the stock from the put holder who exercises against the seller. This is called being put the stock. Both of these transactions happen at the strike price of the option.

Expiration and Exercise

Options also have an expiration date, the expiry. After this date, any outstanding options held and not exercised become worthless. Some 90 percent of options expire worthless. Options can have either an American or a European exercise feature. The American exercise, used for all U.S. stocks and indexes, allows the holder of the option to exercise at any time up until the expiry. Options with a European exercise can be exercised only at expiry. Expiry used to be the Saturday following the third Friday of every month, and for most stocks that is still true. Now, however, options on the indexes and many actively traded stocks also have weekly expiries. The Chicago Board Options Exchange (CBOE) keeps a list of stocks with weekly options for the next few weeks on its website.

Neglecting early exercised options for the time being, when options are exercised, the Exchange is usually left with a decision as to who will be exercised against. To get to this point, the long options holders have already decided not to sell their options for a gain, and since they are being exercised, they want to own the stock (call holders) or be short the stock (put holders). Every one of the sellers of the options does not want to be exercised against, because they will lose money. Some will have capped their loss by buying the option back in a closing transaction, or "buy to close." The rest are just sitting around waiting for the pain of being assigned. The assignment process is easiest to explain using those early exercisers as an example.

Suppose a holder of 100 call options decides to exercise a week early, perhaps to capture a dividend. The Exchange then needs to decide which of the many trades where the calls were sold in an opening transaction, or "sold to open," should be obligated to sell to each exercising long call holder. The Exchange has an algorithm that determines how many should be for each broker and then in turn those brokers have algorithms that determine which clients are assigned. Depending on the number of "sold to open" transactions outstanding, how many are at your broker, and your broker's algorithm, you may be assigned one contract, your whole position, anything in between, or nothing. The point is that selling options carries a risk of assignment that may not be measurable.

Contract Size

The options contract is also very specific; it is for 100 shares of stock. However, a few exceptions to this have recently appeared. In March 2013, mini options for a small number of high-priced stocks and the indexes became available. In these the contract is for only 10 shares of stock. Two months later jumbo options came out for the indexes as well. These jumbos cover 1,000 shares of stock in the contract. So now for the S&P 500 you can buy a mini, normal, or jumbo size option contract. This sounds a bit like Goldilocks and the Three Bears. Look for the one that fits you just right. At this writing, both the mini and the jumbo options are very illiquid, rarely traded, and a total disaster. They may catch on, but until they have massive liquidity you should stick to the original 100-share contracts. It is better to trade one liquid contract than 10 illiquid ones. It is also better to trade 10 of the original liquid contracts than one of the new illiquid jumbos. Liquidity matters more than saving on commissions or having the ability to micromanage positions in strategies.

For the purposes of this book and to avoid confusion going forward, I will always be referring to the normal monthly expiration schedule unless otherwise indicated, and the standard 100-share contract size. At last look, this has led to almost 600,000 different contracts to trade across all stocks and strikes. That is a big number.

Price Terminology

Options prices are determined by many factors, but two are the most important. They are the time to expiry, or time value, and the price of the stock relative to the strike price, or intrinsic value. For a stock trading at a price of 85, the 80 strike call option would have $5 of intrinsic value (85 minus 80), whereas if the same stock were trading at 75 the intrinsic value would be zero. (In fact, if the stock price is at or anywhere below the strike price, the intrinsic value is zero.) The total option price is then the time value plus the intrinsic value. So if that 80 strike call option is priced at $6.50 when the stock price is at 85, it is the sum of $1.50 of time value and $5 of intrinsic value. If it is priced at $1.00 when the stock price is at 79, then it is the sum of $1.00 of time value and no intrinsic value. How close the stock price is to the strike price, interest rates, dividends, and the level of risk in the stock relative to the market can all impact the option price, but these two factors are sufficient for short periods of time.

An option can be in-the-money (ITM), at-the-money (ATM), or out-of-the-money (OTM). This is a reference to where the price of the stock is relative to the strike of the option. For call options, an in-the-money call is one where the stock price is above the call strike, so it has a positive intrinsic value. At-the-money calls have the same or nearly the same strike price as the stock price, and out-of-the-money calls have a strike price well above the stock price. The opposite is true for puts. In-the-money puts have a strike price above the stock price, at-the-money puts are still near the stock price, but out-of-the-money puts have a strike price well below the current stock price.

Why Use Options

Options seem to be pretty complicated, but once you get the hang of them it is not so difficult to use them. But we have not looked at why you would want to use them. There are many reasons. First, options cost less. Recall from earlier that the price is a function of time value added to an intrinsic value, the amount the option is in-the-money. For the $85 strike call that is $5 in-the-money, the call option might cost $6.50 if it has some time until expiry. But that $6.50 is only a fraction of the $85 price. You will use less than 8 percent of the capital that it would take to buy the stock in order to buy the option. This ends up delivering very high leverage at times. If the option is deeply in-the-money and close to expiry, it may move nearly penny for penny with a move in the stock price. With only 8 percent of the capital outlay and nearly the same price performance, this is a 12:1 leverage.

The lower cost for the option also means that you have lower risk. Whenever you buy an option, you are at risk for only the premium paid to buy it. You cannot lose more than that. So if that stock fell to $75, then you would lose the full $6.50 paid. But if you bought the stock at $85 and had it gap down to $75, you would be out $10 and still have additional downside risk. Options limit the risk. You will see later that they can also help to control risk by adding protection to a position.

So options can control or lower risk, increase leverage, and do it at a lower cost than using stock. Sounds worth exploring further, doesn't it?

How Different from Stock

Before you go and throw stocks totally off of your investment or trading plan, though, there are some things that are different with options than with stocks. I have already mentioned that they cost less. That is in the plus column. Another one in the plus column is that long options holders do not incur margin costs. Since you are at risk for only the premium paid, there is no need for your broker to take extra margin.

But options also expire whereas the stock does not. You may have a great plan, buy options to execute it when it triggers, and end up losing money because the stock price stalled but the option just kept losing value from the decay of time value. The commission costs are also higher. This may not be a big deal if you are trading a million shares of the S&P 500 SPDRs and comparing the cost to 100,000 S&P 500 SPDRs call options, but if you are trading 1,000 shares of IBM and comparing it to 10 call options it can be material. This is especially true due to the fact that the option costs a fraction of the price of the stock. Even if the nominal value of the commission is the same, the cost as a percentage of the capital used is much larger.

When you use options instead of stock, you are also forgoing dividends. Options holders are not entitled to dividends. This may be important in a staple stock with a big dividend like Campbell Soup (although there are many stocks that pay no dividend where it will not make a difference). What is worse is that when a stock goes ex-dividend, if it was anticipated the option price may fall anyway even though the options holders were not paid a dividend. For large distributions, splits, and unanticipated distributions the options strikes may be adjusted for the distribution. This is also often not ideal. Be aware which case fits your trade.

Finally, options can be relatively expensive to trade in terms of their execution costs. Many stocks now regularly trade with only a penny or two bid/ask spreads. Unless you are trading the S&P 500 SPDRs options, you are more likely to see spreads of a nickel or even 10 cents or more. And that is in liquid options. For those that trade only a couple hundred contracts per day, the spreads can be very large. Think about how a higher commission and a higher bid/offer spread on a security that cost a fraction of the price of the underlying stock can impact your trade. And this can get worse. Options are generally less liquid than stocks. This means that certain order types that can be used for stocks are never used in the options world. A market order in IBM, giving you maybe 5 to 10 cents of slippage in a

$200 stock, is meaningless if you are right about the trade setup. But using a market order on an option trade can be deadly due to the lack of liquidity. You might get one contract at the quote you see and then fill the rest 50 percent higher. Always use limit orders with options—no exceptions.

Options Tables

Reading an options table to see the quotes for all the puts and calls and knowing what you are looking at can be a challenge at first. I have re-created the closest two months options tables for Google in Table 8.1. There are a lot of numbers here, but it is not so hard to walk through. The table is split into two sides, the one on the left for calls and on the right for puts. The column down the middle separating them lists the expiry first and then the various strikes underneath it. I have truncated the list for Google to only a $50 range of strikes for only the September and October expiries for 2013. This data were taken on September 9, so there were roughly two weeks left in the September options. The column labels Last (last price traded), Change (from previous price traded), Bid, Ask, and Volume are all self-explanatory. You see the same data when you trade stocks. The next column, IV, for implied volatility, is a measure of the risk or uncertainty of the options and is determined from the volatility in the market and the stock itself. The lower the IV, the less volatile the stock and options are. The adjacent column, OI, or open interest, tells you how many contracts were outstanding as of the prior day's close. As an options trade can be opening or closing, this is useful to see where the majority of trades are focused, and how it changes over time. The last column, Delta, is a measure of how the options price will change with a change in the stock price.

Google Options Table

Call									Put							
Last	Change	Bid	Ask	Volume	IV	OI	Delta	Description	Last	Change	Bid	Ask	Volume	IV	OI	Delta
								Sep. 20, 2013								
16.80	+2.55	16.40	16.90	105	18.01%	2.03k	0.652	875	6.50	−2.65	6.50	6.70	68	17.75%	826	−0.348
13.40	+2.00	13.20	13.60	139	17.08%	1.47k	0.582	880	8.30	−3.15	8.10	8.40	66	17.18%	1.01k	−0.418
10.70	+1.70	10.30	10.70	241	17.31%	1.4k	0.508	885	10.20	−3.75	10.30	10.60	163	16.91%	572	−0.492
8.20	+1.25	7.90	8.20	358	16.70%	2.89k	0.432	890	13.20	−3.65	12.60	13.10	50	16.79%	919	−0.568
6.20	+0.85	5.90	6.20	382	16.81%	2.08k	0.355	895	16.20	−4.05	15.80	16.20	26	17.10%	683	−0.645
4.60	+0.50	4.30	4.60	311	16.52%	5.81k	0.288	900	19.50	−4.40	18.70	19.80	26	16.61%	972	−0.713
3.10	0.00	3.20	3.40	175	16.35%	1.78k	0.224	905	23.30	−4.55	22.50	23.70	3	16.95%	323	−0.776
2.35	−0.05	2.30	2.45	109	16.44%	1.51k	0.175	910	27.45	−4.70	26.60	27.70	2	17.04%	292	−0.825
1.65	−0.20	1.65	1.75	53	16.68%	1.42k	0.131	915	C36.55		30.90	32.30		18.81%	182	−0.869
1.30	−.015	1.20	1.35	50	17.18%	2.87k	0.102	920	35.80	−5.35	35.00	37.20	3	15.91%	179	−0.898
0.95	−0.20	0.90	1.00	342	17.68%	2.86k	0.076	925	C45.90		39.70	42.00		21.95%	235	−0.925
								Oct. 18, 2013								
33.60	+2.45	33.20	33.60	9	24.28%	583	0.574	875	23.10	−2.85	22.80	23.20	5	24.13%	344	−.0426
30.40	+1.90	30.30	30.80	154	23.91%	737	0.546	880	25.30	−3.05	24.90	25.40	223	24.12%	444	−0.454
28.00	+2.00	27.70	28.10	43	24.26%	485	0.517	885	27.20	−3.50	27.20	27.70	22	23.84%	257	−0.483
25.20	+1.60	25.20	25.70	42	23.63%	822	0.489	890	30.00	−3.40	29.70	30.20	10	23.74%	287	−0.511
C21.40		22.80	23.20		23.34%	1.26k	0.460	895	C36.35		32.30	32.80	5	23.63%	257	−0.540
20.50	+1.20	20.60	21.00	31	23.23%	1.83k	0.431	900	35.50	−3.75	35.10	35.60	31	23.43%	362	−0.569
18.80	+1.40	18.50	18.90	2	23.46%	502	0.401	905	C42.20		38.00	38.70		23.66%	100	−0.599
16.70	+1.10	16.60	16.90	69	23.44%	708	0.372	910	C45.45		41.10	41.60		23.63%	273	−0.629
15.50	+1.55	14.80	15.20	3	23.38%	572	0.346	915	C48.90		44.20	44.90		23.40%	66	−0.655
C12.45		13.10	13.50	6	22.70%	830	0.320	920	C52.40		47.70	48.30		23.20%	104	−0.680
11.80	+0.75	11.70	12.10	46	22.80%	413	0.293	925	C55.85		51.00	51.80		23.11%	153	−0.707

Data from the Chicago Board Options Exchange on September 9, 2013, at 11:22 EDT, with Google stock at 885.31.

There is a lot more information that can be gleaned from this table when you are comfortable with how to read it. Without looking at the

stock price, you can tell it is going up this day because the call prices have risen and the put prices have fallen. You can also see that OI on the call side outweighs OI on the put side and the most popular call strike is the 900 call in both months from the OI. Notice that most of the volume is taking place in the near month, September, and that many strikes in October have not even traded (those denoted with a C in front of the last price). You might also notice that the IV is very low at 16 to 17 percent in September and only 23 to 24 percent in October. This happens to be very close to the IV of the broad market index ETF SPY. Google is not a very volatile stock. There is a wealth of analysis that can be done on this data. But start with understanding the basics.

Some Basics Applied

Options can be traded just like the stock, and that analogy is useful to make a few points. In some high-priced stocks like Priceline.com and Google, the options can be more active than the stock itself because of the high stock price. Traders usually buy in-the-money (ITM) or at-the-money (ATM) calls, where the strike price is lower than the cash price of the stock, or just out-of-the-money (OTM) calls, where for example the stock price is $885 but the strike is 890, and use the technical levels in the stock price to stop the option trade or to take profits. In this way they use a fraction of the capital it would take to buy the stock. Using Google at $885 as an example, the 880 strike ITM calls for the near month were offered near $13.60, just under 2 percent the price of the stock. The 890 strike OTM calls were offered at $8.20, or about 1 percent of the price of the stock. Which to choose, ITM or OTM, is a big bone of contention with traders.

I know I promised to avoid the Greeks, but one Greek, delta, helps to illustrate the difference. Delta is the change in option price with the change in price of the stock. So the higher the delta, the more closely the option tracks the stock. An ITM option has a much higher delta than one that is OTM, and the deeper in-the-money, the higher the delta, for a given expiry. And the change in delta as you move up and down the strike prices is asymptotic to 0 and 1. It is near zero for far OTM calls and near 1 for deeply ITM calls. The 880 strike call had a delta of 0.582, whereas the 890 strike call had a delta of 0.432. So for every $10 that Google moves higher, the 880 strike call will move about $5.82 while the 890 strike call will move only $4.32. For that $10 move the ITM call would have a 42.8 percent return, while the OTM call has a 52.7 percent return. Seems like the OTM call is the best bet, right? The trouble is that it works the same way on the downside. If Google drops $10, then the ITM call loses 42.8 percent while the OTM call loses 52.7 percent. This is where the debate comes from. Do you favor protecting capital or maximizing return? If you are trading calls in this manner as a stock replacement strategy for a longer-term trade, then I urge you to trade ITM calls not too far below the cash price, to protect your capital. You are already getting massive leverage over the 1 percent return the stock had for that $10 move.

This brief digression was for a reason. The debate between using ITM and OTM strikes can be heated. And both are good for different reasons. The correct option strike to employ is really dependent on why you are using options and how you are designing your trades. Most of the trades we will be creating will use OTM options. This is

intended to lower cost and capital at risk. It is through creating combinations of options around these primary trades that we can also adjust that delta higher and manage risk better. So don't get stuck thinking ITM options are the only way to trade stock. I promise we will not talk about delta again or ever look to calculate it.

As for the other options Greeks, theta is the most important. This measures how options values decay through time. Just know that this happens because they have an expiry. Merely holding an option as the stock moves sideways loses money. Just what you need, right? One more way to lose money. The rest of the Greeks we don't care about. They are important to many strategies and to perfecting the options price, but are not relevant to our trading strategy. There is a cousin of one of them, though, implied volatility, that will come up later, but again with no calculations. There are no doubt millions of pages of text about options and the Greeks and many different trading styles to take advantage of all of these nuances. All are important if you are trying to ensure that you do not pay more than fair value for an option and that you sell it for at least fair value, or you are trading specifically for the changes in the Greeks or volatility. All of that is for the quants, not us. Please do continue to educate yourself about options, as any additional learning can help add to your edge, but this is not the place to write it all.

There is one final note on all options before we get into the combinations. Any short option combination will require margin to some degree, with two exceptions. First, short put option combinations can be executed outside of a margin account, like in an individual retirement account (IRA) or a 401(k), using what brokers call cash-protected or cash-covered puts; basically, the broker reserves the full price of the naked put. Second, short call spreads can be executed in an IRA or a 401(k); all other short call combinations require a margin account.

With a basic understanding of the options building blocks—a long call, short call, long put, and short put—and an introduction to the concepts of delta and theta, we can start assembling them to see what some combinations look like and how they react. In the chapter following this descriptive chapter we will go through some practical applications using charts. After that we will be ready to design trade ideas from our watch list.

Conclusion

Options can be great tools once you understand them and apply them to the right situation. In this chapter we started to explore them and many of their characteristics. You should now understand all of the specific characteristics of an options contract. You should understand the difference between the rights of the option holder and the obligations the option seller. You should understand the characteristics of the option contract, like the size of the obligations and when the rights can and cannot be exercised. You should understand the pricing terminology of in-the-money, at-the-money, and out-of-the-money options, and how that creates intrinsic value. You should also comprehend how an options price is the sum of the time value and intrinsic value. You should realize why you would use an option instead of stock and what some of the advantages and disadvantages of options are. Finally, you should be able to identify some differences between options and stock and know when they will make a material difference.

After this introduction, we can now move on to developing combinations of these tools to design trades for our stock setups.

Options Combinations

With a basic understanding of the options building blocks, puts and calls, you can now start to look at how you might combine them to your advantage. Puts and calls can be combined in many different ways to produce combinations that we will use. The combinations are endless. Here is a list of the 13 most popular ones, starting with the most basic and working into more complex combinations. These will cover most of our trades directly or through combining them.

1. Covered call or buy write .
2. Long a put or call.
3. Short a put or call.
4. Long a put spread or call spread.
5. Short a put spread or call spread.
6. Long a ratio put or call spread.
7. Long or short a Calendar.
8. Long or short a Diagonal.
9. Long or short a Butterfly.
10. Long or short a Straddle.
11. Long or short a Strangle.
12. Long or short an Iron Condor.
13. Long or short a Risk Reversal.

Option trading, like any other business, has its own lingo. Once you get to know it, it will become part of your daily vocabulary as well. We will look at each of these combinations with an eye toward when they might be used and how. At the end of this chapter you should be able to define each strategy and have a good understanding

of when they might be used. Let’s take a brief look at each of these.

Covered Call or Buy Write

The covered call is nothing more than selling a call, usually at a strike above the current stock price, when you already own the stock. It is the most popular options strategy employed by far. Most investors or traders use it to produce extra income from their stock holdings. It does cap your gains in a position if it is in-the-money (ITM) at expiry. If this happens, you will be called away at the strike price. When the call is sold at the same time that the stock is purchased, it is called a buy write. Some traders use this strategy the same way that they do the covered call, to earn extra income. If the first expiry passes without being called, they write another covered call.

The buy write can also be executed as a distinct play to attempt to capture the move in a stock while lowering the entry cost. The chart of Boeing in Figure 9.1 helps to illustrate its use. A trader in this situation on July 5, 2013, seeing a breakout possibility, might elect to own the stock at 104.20 and then sell the weekly 106 calls for 50 cents, making a buy write. If the stock moves above 106, the trader is called away but for a gain of $2.30 in one week. That is $1.80 on the stock plus the 50 cents from selling the call. A 2.30 move in a week for Boeing is a big deal, so you should be happy with that, but if the short call expires, then the trader might sell the July monthly or August calls to bring in more premium and lower the trader's cost basis further.

FIGURE 9.1 Boeing—Covered Call/Buy Write

Source: **TradingView.com**

Long a Put or Call

We have already spent some time discussing long puts and calls. Buying a call is a low-cost way to capture upward price movement in a stock. And buying a put is a method to capture downside movement. Both limit the capital at risk to the premium paid for the option. In the case of the put buy, it is also the only safe way to get short exposure to a stock that has high short interest. We discussed in Chapter 7 that it is prudent to take names with high short interest (over 10 percent) off your stock watch list if it is a short trade setup. This is because the risk of a short squeeze means that you would be subject to theoretically unlimited risk on the stock moving higher. This can happen in a flash and always happens when you are not prepared for it. You set a stop loss to buy the stock and the price gaps over it and does not execute because everyone else is in line in front of you. The 50 cents you thought you were risking turns into a $2, $5, or $10 loss. Ouch! Buying a put in this case changes that dynamic. If you want to risk 50 cents, you buy a put that costs 50 cents. If the price of the stock moves $10 higher against you, then you are out 50 cents. That is it. If the price continues to fall, then you participate in the downside movement. That is one of the most magical powers of options.

Short a Put or Call

Shorting calls and shorting puts, or call and put writing, are used for two very different reasons. Shorting a call by itself can be a risky venture. Whereas buying puts in a stock that has high short interest gives you magic powers to avoid a short squeeze, selling a naked call (unhedged with stock or another option) is like anti-magic. The most you can make on this trade is the premium that you sold the option for, but the obligation to sell the stock can put you short in a stock just when you do not want to be. A $10 gap above your strike will leave you exposed at just the wrong time. Most traders who sell calls naked do so at levels that are perceived to be safely above the current price, so that the trader can hedge them by buying the stock, creating a covered call, before the price reaches the strike price. You will need to leave a lot of capital or margin in your account to be able to hedge after trading a short call.

Shorting a put is very different. There are two major strategies that employ short puts. The first is to generate income, or premium as it is called by traders. The same way that stockholders sell covered calls for premium, put writers in this strategy are looking to collect the premium from selling the put. They sell puts with strikes below where they believe the stock will trade by expiry. They rely on the combination of their analysis of the price movement and the time decay, theta, to lower the cost of the options until they get to expiry or a return acceptable to the writer. They can close their naked put by buying it back, or hedge by shorting stock, or they can also roll the put down or out or both. Rolling the put means buying it back and then selling either a lower strike put (rolling down) or a longer expiry put (rolling out) or both (rolling down and out).

Time is working for option writers. If you sell a put or call and the stock goes nowhere, you win. The second put selling strategy uses the same principles, but to pick and sell a strike that is likely to be reached at expiry. In selling puts that are expected to be in-the-money at expiry, traders are looking to own the stock at a lower price than they can buy it today, and lower than they can buy it if it falls to their strike. The chart of Verizon in Figure 9.2 offers a good example. If the stock is at 51.29 and traders sell a 50 strike put for $0.50, they will own the stock with a basis of 49.50 if they are put the stock at expiry: lower than 51.29 and lower than 50. They want to be put the stock at expiry, or at least are comfortable owning it at the strike price they are selling. If the stock does not reach the strike, then they get to keep the $0.50 premium like the first put sale strategy. They can always

buy the stock if it does break above the resistance noted.

FIGURE 9.2 Verizon—Put Sale

Long a Put Spread or Call Spread

A call spread is nothing more than buying a lower strike call and then selling a higher strike call of the same expiry. A put spread is the same but buying a higher strike put and selling a lower strike put. This is also known as a vertical spread. Let's use the call side to explain the rest, but you can replace call with put throughout this explanation.

The strike of the long call is chosen based on your analysis of where a trigger should be, and the short call strike is chosen either to match where resistance is expected or at a point to reduce the cost of the spread to an acceptable level. I generally do not like to sell the upside call to create the spread if the premium from the sale does not give me at least 25 percent of the premium paid for the long call. I also look to maintain the cost of the spread below one-third of the difference between the strikes. So for a $5 spread I do not want to pay more than $1.33. This ensures a reward-to-risk ratio of at least 3:1, or risking $1 to make $3. So, for example, if I am reviewing a 50/55 call spread in Dollar Tree in Figure 9.3 and the 50 strike call that I am purchasing costs $1.75, I want the 55 strike call to generate at least 44 cents to meet the 25 percent rule. You can sell the upside call for less, but in my view it is not worth capping the profit in the trade for less than 25 percent of the original cost unless it is a very stable stock with low volatility. That 55 strike call must also generate at least 42 cents in premium to meet the requirement that the net cost be less than one-third of the difference in the strike prices.

FIGURE 9.3 Dollar Tree—Long Call Spread

Call spreads are used initially when there is strong defined resistance above a trigger or the cost of the desired long call is prohibitive. This is also in a trade where there is a clearly defined directional bias to the upside via some trigger. The trader wishes to participate in the stock price move. A long call can also be turned into a call spread at a later date by selling the higher strike call, for more money, after the price of the stock has risen.

Short a Put Spread or Call Spread

Being short a put spread or call spread is technically just the opposite of being long one, but the implications are a bit more complicated. Being short a call spread is being short a lower strike call and then buying a higher strike call. Being short a put spread is being short a higher strike put and long a lower strike put. With this trade, you will earn a credit to enter it because the option that you are selling is close to the price of the stock and has more value than the option that you are buying, which is less likely to be in-the-money at expiry. The difference between the two, or premium, is the maximum you can earn.

One big difference between being short a put or call spread instead of just being short a put or call is that it limits the risk in the trade. By buying the put or call at the further strike, you are limiting your risk to the difference between the strikes of the spread, less the premium earned from selling the spread. So if you sell a 95 strike put for $2 on a stock with a price of 94, you can either collect $2 or be at risk to buy the stock on a closing price of the stock at expiry under 95. In this trade your downside could be as much as $93 if the stock fell to zero. If instead you additionally bought the 90 strike put for 50 cents, to create a short put spread, then your maximum gain is reduced to $1.50, but your maximum loss is also reduced to only $3.50. If the price closes below 90 at expiry, your losses are capped. This is because in essence you will have two options exercised at expiry. The short put will be exercised against you, forcing you to buy the stock at 95. But then you will exercise the long put and sell the stock at 90. Your losses at expiry are $5 but you made $1.50 on the initial sale of the spread. In actuality your broker will often take care of both exercises of this for you if they are both in-the-money at expiry. The short call spread works the same way.

There are two reasons that we will use these tools in our trade design. The first is to earn premium. In this trade we are looking for the short spread to finish out-of-the-money and just collect the premium. In these trades we will elect to sell strikes that are unlikely to be in-the-money at expiry from our analysis of the technical situation in the chart. If there are confluences of support levels on a stock at a price of 24, for example, we may sell the 22 strike put. The second put that we are buying, to make the spread, is then selected to balance the profit from the sale with the risk in the trade. More on this later. The second looks very similar but is intended to serve a different purpose.

Sometimes we will sell a call spread or put spread to reduce the cost of the primary trading strategy. If, for example, we are looking to participate in the upside price action in Google above 900, we may buy a 900 strike call to do so (see Figure 9.4). This may cost over $25 per contract if it has some time left until expiry. Since we believe that there is strong support for Google at 860, we may decide to also sell an 840/820 put spread for $5. This reduces the cost by 20 percent, increasing the leverage in the trade. This put spread sale then is a funding trade. We still would like the put spread to expire worthless, but we put it on for a different reason.

FIGURE 9.4 Google—Short Put Spread Example

Long a Ratio Put or Call Spread

A slight variation on the put or call spread is a ratio put or call spread. Using a long put spread as the base case, moving to a long ratio put spread is nothing more than selling two (or more) of the lower strike puts. So if we are trading a 50/45 put spread in Dollar General, we buy a 50 strike put and sell a 45 strike put, to participate in a stock price move lower from 50/45. By instead buying a 50/45 1 × 2 ratio put spread, buying one 50 strike put and selling two 45 strike puts, you still participate in a move in the stock lower from 50 to 45, making $5. The 1 × 2 costs less, as you are selling two options instead of one in a regular spread. But in this structure if the price at expiry is 45 or under, then you will also be put the stock due to the extra short put. This trade has a breakeven lower at twice the spread less the cost to put the trade on. So if the 50/45 1 × 2 cost 50 cents, then it would have a breakeven at 40.50. Between 40.50 and 45, although you were put the stock, you can immediately sell it for a profit against the $5 collected from the put spread. At 45 you will own the stock with a basis of 40.50, the 45 price that you were put the stock less the $5 from the put spread.

There are a few reasons to use this trade over the straight put spread. The lower strike is usually chosen near a strong support level, so that if you are put the stock, your basis is lower than where the stock price settles. If you want to own the stock at a lower price after participating on the downward movement, this is a good construction. You might also select the lower strike at a level you believe is safely below where the stock will settle. In this construction you are looking to participate in some downside in the put spread, but to avoid being exercised against. The sale of the second put is solely to reduce the cost to enter the trade, providing more leverage, or as a possible future entry point to own the stock. Many traders also use this trade on the call side when they are long a stock that has been depressed and looks set up to move higher. If they originally bought Campbell Soup (see Figure 9.5) at 44.50 and it is trading at a price of 43.50, for example, they may buy a 44/45 1 × 2 ratio call spread, buying a 44 call and selling two 45 calls, to ramp up their earnings stream. Often these 1 × 2 ratio call spreads can be constructed for zero cash outlay. The beauty of them when you already own the stock is that you then can earn double the upside at no additional risk, to a capped level. If the price exceeds the higher strike, you have a call spread that maxes at $1 and you get called away on your stock $1 higher. Your net sale proceeds are at a price of 46 instead of 45 if you had just sold the

stock there or a covered call.

FIGURE 9.5 Campbell Soup—Ratio Call Spread

There are a few variations on the ratio spread. I have seen traders use ratios of 1 × 2, 1 × 3, and 1 × 4, and they also can use odd ratios. Looking back to the short put spread, one reason for entering it was to fund a different trade. Ratio spreads can be used in this manner to adjust the cost of the other trade. In these instances a ratio of 2 × 3 or 7 × 17 or any other ratio that creates the desired reward-to-risk outlay on the entire trade may be used. Finally, the farther out-of-the-money strike option may also be split in a ratio. Using the previous Dollar General example, instead of buying a 50/45 1 × 2 ratio put spread, buying one 50 strike put and selling two 45 strike puts, we might decide to instead buy a 50/45 − 40 1 × 2 split ratio put spread. In this case we still buy one 50 strike put, but we sell one each of the 45 strike put and the 40 strike put. This construction participates in the downside from 50 to 45 and then is capped between 45 and 40 at $5. It then will lose some of that gain if the stock continues to fall until at a price of 35 it is at breakeven. If the stock closes below 40 at expiry, you will be put the stock but at 40 and with a basis of 35. Traders may adjust the ratio put (or call) spread in this manner because they see a downside setup that they wish to participate in that has more certainty to a particular level, the first downside strike, and they are willing to own it much lower or wish to avoid owning it altogether, but wish to reduce the cost of the initial put spread.

Long or Short a Calendar

A Calendar spread is just a fancy name for a call or put spread where the two options have different expiries. The two options usually have the same strike price. With one month or more between the expiries, these are also referred to as time spreads. There is one weird nuance to Calendar spreads, though, when compared to regular spreads. Using the call variety this time, a long call Calendar is one where the front month is short and the back month is long. So a long Google (refer to Figure 9.4) July/August 900 call Calendar is short the July 900 call and long the August 900 call. I find that if you look at it as if you are buying time it becomes more intuitive.

Traders may buy a call Calendar when they think that the price of a stock will rise over time, but not too fast. Rather than just buying a call or an outer month to give the stock time to rise in price, they add a short call in the near month to lower the cost. The strike is chosen to reflect the potential resistance areas overhead with an understanding of the time until the expiry as well. The perfect scenario for a trader who is long a call Calendar is for the stock price to close just under the strike price of the short option at expiry, making it worthless. At that point the long call that remains will still have time value, usually more than the initial premium cost of the combination. This leaves the trader with two choices: sell the long call to take profits, or continue to hold the long call looking for stock price appreciation to sell it higher later. If the stock is expected to trend from your technical review, you would give the long call some time to rise in value.

It is always possible that your strike pick will end up ITM at expiry. In this case, closing the spread will usually be profitable. This is because the short call will trade at its intrinsic value—the option has no time value or theta left. So a Google 900 call at expiry when the stock price is 905 trades at the intrinsic value of $5. The long call, however, still has a lot of time value in it in addition to the intrinsic value. At extreme moves, the Calendar can move to an unprofitable situation. If the stock is materially above the short call strike price, the spread will move closer to intrinsic value on both options, lessening the time value differential. These trades are not for use when there is the possibility of an outsized move above the short call price. The alternative to closing the spread is just to buy back the short call and let the long call continue to move higher. This is riskier as there is no guarantee that the technical view will play out as expected. A long put Calendar is very similar and used when the trader expects the stock to fall over a period of time. The choices at expiry whether the price puts

the short put ITM or not are the same. There is no need to rehash it for long put Calendars.

A short call Calendar, then, is a combination where the trader is long the near month and short the outer month. A short IBM June/July 200 call Calendar, then, is where the trader is long the June 200 calls and short the July 200 calls. Putting on a short call Calendar generates a credit. Traders will use this combination when they want to earn the premium from being short the longer call, but are also looking for protection in the near term against a strong move higher, by also buying a cheap front-month call.

I find the short put Calendar easier to understand and a most useful tool on the short side. The short Goldman Sachs August/September 140 put Calendar spread is the combination of a long August 140 put and a short September 140 put. In the macro view, this is a trade taken with the expectation that the price will close above 140 at September expiry. We learned earlier in the straight put and call section that traders will sometimes short a put as a trade entry mechanism or to collect premium with the expectation that the option will expire worthless. This is the same reason to employ the short September expiry put in this put Calendar spread. When traders believe that there is short-term risk to the downside, they convert this to a put Calendar, also buying the August 140 put in the example. This will sometimes happen on an earnings release or if some scheduled news announcement puts the initial short put trade at risk.

This is an interesting aside. Traders do not have to enter into both options of the short put Calendar at the same time. They also do not have to exit both pieces at the same time. When that spike down does come, and traders then expect a reversal higher, they can sell the closer August put to enhance the value of the trade, leaving the short put in September, but with more premium in their account. So if the price drops to 135 and the August put can be sold for $7, the trader would still be short the September 140 put, but be protected down to a price of 133 (the 140 strike less the $7 collected on the August put sale). A short put Calendar can also be used as the funding piece of a larger combination of options.

Occasionally there is a stock that looks like it could have great upside potential but may be challenged or at risk for downside in the short run. In that case a trader may opt to both buy a call Calendar and sell a put Calendar. If the stock price falls the trader can close the shorter-dated long put to gain some price buffer for the downside, looking for the longer-dated short put to expire on a rebound in the stock price later. If the stock price just rises, then the put Calendar sale served the purpose of funding the call Calendar more cheaply.

Let me give you one final point on the use of Calendars. I find long call and put Calendars preferable over straight buying of calls and puts when the market seems to be pausing within the current trend. They give the ability to express a view with the trend in a longer time frame but without all of the cost that a straight call or put buy would entail when there is no short-term gain to be seen. The alternative, as always, is just not to trade until the pause is done and the trend resumes, but that is risky in that you may miss the start of the move as well. It is rare that I will use a short call Calendar because of the margin required for short calls, but I use short put Calendars often as funding tools, and as a specific strategy around events like earnings announcements.

Long or Short a Diagonal

A Diagonal spread is basically a just a combination of the call or put spread and the Calendar spread. For a long call Diagonal, you buy a call option in one expiry and sell a call option at a higher strike in a longer-dated expiry. Using the Google July/August 900 call Calendar example from before, to convert that to a call Diagonal the trade might instead put on a Google July 890/August 900 call Diagonal. Here the trader is selling the July 890 call and buying the August 900 call. This can also be a bullish trade, looking for the stock price to rise, but not as fast as you think it may rise initially in the call Calendar scenario.

Short call Diagonals can often be entered for a credit, as the near month that you are selling is usually worth more than the outer month you are buying. The reason for using this would be if through your analysis you see that the stock is in a resistance zone or there is one nearby above that may take some time to work through. This can give added confidence to sell a lower strike call than you would with a trending stock, where you would use a Calendar instead. Entering for a credit gives some leeway to close out the shorter-dated option early if you are wrong and it moves faster. This trade structure has maximum loss of the distance between the strikes (less the initial credit). If the shorter strike 890 call expires worthless as anticipated, then the trader is left with the same decisions on the remaining long August 900 strike as in the call Calendar scenario: sell or let it run higher with the trending stock price. The short put Diagonal is the same structure: short a near-dated put and long an outer month put at a lower strike. A Goldman Sachs August 150/September 140 put Diagonal would be an example. In this Diagonal the trader is looking for something to stall Goldman Sachs's price above 150 in August and then for it to continue lower. This might be a pattern completing or a read of open interest in the August options chain. These two types of trades, when executed near the current price in the stock, are a bit of a gamble on timing and make them difficult to have confidence of winning. But when they are done farther out-of-the-money, there can be more certainty that you will be able to keep the credit.

The flip side of these trade structures, long a put or call Diagonal, are more frequently used for directional plays. If traders were to see that Goldman Sachs looked to head lower and wished to participate right away, they might buy the August 150/September 140 put Diagonal. Here they are buying the August 150 put and selling the September 140 put in anticipation that the stock falls but meets with

support before hitting 140 or bounces above 140 by the September expiry. Traders can sell just the August 150 puts on a move lower in the stock, or leg out of the trade when they think a reversal is forming. In this trade the lower strike may be chosen either to avoid being put the stock due to some support or at a level that the trader wants to buy the stock in the future.

Long put or call Diagonals usually cost money to enter (some can also be for a credit), and that premium is a good approximation of what is at risk, provided that the trader closes both options at the same time. So if the August 150 put is bought for $3 and the September 140 put is sold for $1, the total premium of $2 is at risk. Traders would choose this structure over a put spread with the same strikes if they do not want their profits capped on a move lower in the short run and think the stock will recover, or if they think that the support will hold for a long time so then can lower their cost of entry in the whole trade. Traders would choose this structure over a put Calendar at the 150 strike if they think it may take a lot of time for a recovery to happen in the stock price once it stops falling. The long call Diagonal can be played for the opposite move. The trader is looking to capture the near term upside in the stock by buying the Google August 900 calls and expecting it to stall or fall back (due to reaching an all-time high or due to high open interest in the September options chain below 920) and selling the September 920 call. These spreads also cost money to enter, and the trader may choose to close out one leg of the spread early or before the other.

I find the short version of these trades, yielding only a small credit and then hoping that the price move accelerates, not to be very useful or interesting and rarely use the structure. The long version is another story. These can be quite lucrative, especially for an earnings play in a volatile stock with high short interest. The stock can miss earnings expectations and fall precipitously, allowing you to sell the shorter-dated option, and then short covering moves the price back higher, leaving the longer-dated option at little risk or far enough out-of-the-money that it can be protected or hedged cheaply. Another consideration before you decide to trade these is that long Diagonals (like short Calendars) use margin. So even if you enter the trade for a credit you may incur a cost besides the commissions.

Long or Short a Butterfly

A Butterfly involves trading four call or put options on three different strikes. The strikes are equidistant from one another, so a call Butterfly on Google might use the August 900/940/980 strikes. A long call Butterfly specifically would entail buying the two outer strikes, the 900 and 980 calls, and then selling of the two middle strikes, the 940 calls. This creates the equivalent of being long a call spread (August 900/940 call spread) and short a higher call spread (August 940/980 call spread) at the same time. As the price of the stock rises at expiry, the Butterfly increases in value to a maximum at the middle strike and then falls off as the price rises over the middle strike. As it reaches or exceeds the upper strike, it falls to zero value. This is a trade that is targeting a specific price for the stock at expiry, the middle strike. The maximum loss on being long a Butterfly is the premium paid, so it is a low-cost defined-risk strategy. That is the theory you will get from a detailed options book.

In practice, though, stocks move back and forth before expiry, and traders have the ability to close legs of the combination separately or time the price action. We will discuss more on that in the last section. A long put Butterfly operates the same way. The Goldman Sachs July 130/140/150 put Butterfly would be buying a July 130 put and a July 150 put and selling two July 140 puts, looking for a settlement price at July expiry near 140. The center strike is the most important to select. It should be chosen based on an expected support or resistance level in a trend, options open interest, or other patterns. If there is a confluence of support from a Fibonacci level and a traditional pattern target, for example, that also coincides with large (in a relative sense) open interest in the options for that expiry, you have a great middle strike for your put Butterfly. From that point, selection of the two outer strikes is a combination of reviewing near and far put levels that are important to the stock, and how that impacts the price of the Butterfly. Since you are buying the closest strike, it will be the most expensive. The far strike will be the least expensive.

Some start by looking at the long call (or put) Butterfly trade as a long call (or put) spread to choose the near strike. That works. If you want to participate in a move in Google from 900 to 940, then a 900/940 call spread is a great choice. Adding a short 940/980 call spread to create the 900/940/980 Butterfly can reduce the cost and your capital at risk, limiting your profit potential only if the price exceeds 940 at expiry.

A short Butterfly is another way to collect premium with limited

risk. Remember that a short IBM 170/180/190 put Butterfly is a combination of a short 190/180 put spread and a long 180/170 put spread. This gives a smaller credit than just selling the 190/180 put spread, since you are buying the 180 strike put twice. So why do it? If you are wrong, and I mean really wrong, your loss evaporates with the Butterfly. In the 190/180 put spread, if the price falls to only 191 at expiry you keep the entire premium from the spread sale. If it falls to 180, then you lose $10, less the premium you earned on the initial sale. At any value below 180 the loss is a constant $10. But in the short put Butterfly, since you are now also long a 180/170 put spread, your loss starts to lessen under the 180 price as the 180/170 put spread is increasing in value. And, in fact, if the stock just craters and closes at 170 or lower at expiry, the loss in the 190/180 put spread is matched by the gain on the 180/170 put spread. So if you entered the short put Butterfly for a credit, you will keep that credit as your profit. This can be a very cheap insurance policy against being wrong, especially when you see from your technical analysis that there is a potential for a large move when that happens.

This can be a good strategy for a stock that is trading in a channel well above a gap below near expiry. It is usually not that lucrative, though. The chart of Netflix in Figure 9.6 is a good example. As it approaches the July 2013 expiry, there is a gap below from 204 to 176 and support at 192 in between from the price action of March through April. Selling a July 200/195/190 put Butterfly would express a view that the island holds up, but that if it does not, a move below 190 is likely, to close the open gap. On July 3, 2013, you could sell this put Butterfly for about 15 cents, though—not a great reward-to-risk ratio.

FIGURE 9.6 Netflix—Put Butterfly Sale

An often-used variation on the Butterfly is called the Broken Wing Butterfly. In this combination, one of the spreads is smaller than the other spread. In a long Broken Wing Butterfly it is usually the one farther out-of-the-money, and in the short Broken Wing Butterfly it is usually the opposite. So instead of the previous short Netflix 200/195/190 put Butterfly, you might change it to a short 200/195/185 put Broken Wing Butterfly. In this variation, your maximum loss is still the $5 between the 200 and 195 strike puts, but on a blowout lower the $10 gain on the 195/185 long put spread makes for an overall profit of $5. The cost of this trade on the same day was about 15 cents. Paying 15 cents for the possibility to lose $5 and make $5 if you are really wrong seems absurd to me. I suggest you just stay away from short Butterflies altogether.

The Broken Wing Butterfly can make a lot of sense on the long side, though. Going back to the Google August 900/940/980 call Butterfly, it cost $7.20 to enter in early July 2013. If it settles at 940 on expiry, then the reward-to-risk ratio is 5.55:1 ($40 maximum reward against $7.20 at risk). That is not bad. But if you believe there is a moderate risk that the price might blow through 940 up to 980 level, then you would be out the cost of the trade. Using an August 900/940/960 call Broken Wing Butterfly costs a little more, $10.40, and pays out the same as the previous Butterfly until price reaches 960. At that point the Broken Wing Butterfly ensures a profit of at least $10 at any price above 960 while the straight Butterfly can

continue to give back profits. So the call Broken Wing Butterfly is profitable at any price over 910, whereas the straight call Butterfly is profitable between 907 and 973.

Long or Short a Straddle

A Straddle is a combination of a put and call at the same price and expiry. A long Straddle, then, is being long both a put and a call, and a short Straddle is selling both a put and a call. Like being on both sides of the fence, a Straddle lets you participate in a move in a stock in either direction. Seems like a great idea, right? It is if it is priced right. But because a Straddle lets you trade without a view, it is often doubly expensive compared to when you have a directional bias. It makes sense that if you buy a call and a put it will cost about twice as much as if you buy only one or the other.

Straddles are used for a number of reasons. One is to participate in a move out of a consolidation zone. A trader watching Visa (see Figure 9.7) in late June 2013 might have noticed that the consolidation channel was approaching two and a half months, the same length as the channel it broke out of in March. But without a view as to which way it might break, traders might look to put on a Straddle. With absolutely no bias, they might use a 180 Straddle, the middle of the range. This would be a logical choice in the middle of June when the price was in the middle of the channel. To give you an indication, with one month until expiry this 180 Straddle cost about $10 in mid-June. That was 5.5 percent of the stock price, whereas if the trader anticipated that Visa would go higher, the 180 call was only about $5. This means that the stock would have to move outside of the range of 170 to 190 by expiry in one month to start to make a profit. That is a big move.

FIGURE 9.7 Visa—Straddle and Strangle

Another way to play the same channel with a Straddle is when it reaches the top or bottom of the channel. As it reached the top of the channel in late June, the trader could play for either a breakout above the channel or a failure and pullback toward the bottom of the channel by buying the 185 Straddle. This was priced at just under $10 at that time. There are other variations based on the technical analysis review. For example, the trader could buy a longer-dated Straddle, out three months. This was priced at $17. It had a higher cost, but also had more time for a move.

The trader might also look at the technical setup and decide that a $10 move at the top of that channel is unlikely with the bottom of the channel only $8 away. In this case the trader may elect to sell the 185 Straddle and collect the $10 premium. In this trade the trader is looking for the stock to stay in place and ideally at the Straddle strike of 185. If the stock closes at 180 at expiry, the trader keeps the entire $10 premium. This is unlikely, and since the trader is short both a put and a call, he or she must be prepared to buy back one or both legs in order not to be exercised against at expiry.

These strategies are employed by traders for other reasons as well that do not involve straight technical analysis. Options traders may track the historical implied volatility in the options and the historical volatility of the stock and make a determination that the Straddle from these measures is either expensive or cheap. If it is expensive they will sell it, and if it is cheap they will buy it. I mention this here because it is a quite common strategy and you may hear of it, but it is outside of the scope of this book.

Straddles may also be used in conjunction with a stock position. A trader who is starting a position in Visa when it breaks out over 185 might buy a half position in the stock and sell half a position in the 185 Straddle for $10. If the price of the stock rises or stays steady, the trader will get called away on the half position, but with a $10 gain on the trade. So as long as the price does not go over 195 the trader made a good trade. If the stock price falls, then the trader will be put the other half of a full position but have a basis of 180 on the entire position (half at 185 and half at 175).

I find long Straddles to be most useful when several factors align: The stock is moving in a very tight channel for a long time, there are big gaps until support and resistance above and below the current price, and the Straddle is priced at what seems like a cheap implied move in the stock by expiry. Conversely, short Straddles are most useful when the stock is trading in a range for some time with support and resistance tight to the range, and the implied move in the Straddle would take the stock well outside of that support and resistance.

Long or Short a Strangle

Taking the Straddle and adjusting it so that the put and call are on different strikes (still the same expiry) converts it to a Strangle. For our example using Visa, then, instead of selling a 180 Straddle when the stock is at the middle of the channel at 180, a trader may use a 175/185 Strangle, selling the 175 put and the 185 call. This was $4 cheaper than the Straddle, giving only $6 in premium in mid-June. In this combination the trader is looking for the price to remain between 169 and 191 at expiry, and preferably between 175 and 185, the full channel. If it remains anywhere between the strikes, the trader keeps the full $6 premium. The long Strangle could be used as a cheaper way to trade for the channel break either way, but the trader also does not participate in profits until the stock has moved further in price than the Straddle. It must move beyond the range of the Strangle by the premium paid in order for a profit. It required a move outside of the 170 to 190 range to profit in the Straddle but outside of 169 to 191 for the Strangle. This is not very different and may be worth it for the trader to pay less in the Strangle.

I find that the preference of one over the other is a matter of the specifics of the stock trade setup. If the channel or anticipated move from the technical analysis is wide, then I prefer a Strangle on the sell side of the trade as it has some initial protection if inertia takes hold. There are times when a combination of Straddles or Strangles or a mix is appropriate as well. If, for instance, traders saw that the setup in Visa might take some time to break out, then they might sell a Straddle or Strangle in the near month and buy the Straddle or Strangle in an outer month. In this trade they are looking to own the outer month Straddle or Strangle after the near month Straddle or Strangle has expired or been bought back very cheaply. The near month sale of a Strangle then is intended to lower the cost of the outer Strangle, or to fund that trade. If you examine this double Strangle closely, you will notice that it could also be described (and often is) as a double Calendar trade or double Diagonal. The trader is in essence long both a call Calendar and a put Calendar.

Long or Short an Iron Condor

A final variation on the Straddle/Strangle is called the Iron Condor. The short version is short a Straddle or Strangle and then long a wider Strangle in the same expiry. The outer Strangle is equidistant from the inner Straddle or Strangle, meaning both are $5 or $10 away, for example. Referring back to the Visa example, the trader might sell a 180 Straddle for $10 and then buy the 175/185 Strangle for $6, creating a 175/180/180/185 Iron Condor. In this trade, the trader takes in $4 in premium and has a profitable trade if the stock price remains within the range of 176 to 184 (the strike of the Straddle plus or minus the premium). Because they are also long the outer call and put, they have a maximum loss of $1 against the potential of $4 profit maximum.

Traders would enter this trade if they expected the stock to remain in a tight range but wanted to limit their risk. In the long version, the trader is looking for a move to stop in a range, near the outer Strangle. You can look at this trade as buying both a call spread and a put spread (the short Iron Condor was short a call spread and short a put spread). Buying the 180 Straddle for $10 and then selling the 175/185 Strangle for $6 (the Visa example) would not make sense in this instance. You would be buying a $5 spread for $4, for a reward-to-risk ratio of only 1.25:1, far lower than our requirement of at least 3:1 reward-to-risk ratio. Trades tend to work better when they consist of a long Strangle a bit away from the current price and then a short Strangle outside it. This is useful when you expect a large move in a stock either way and can design the trade to pick up a piece of the move, not near the beginning of it, for a very cheap price.

Another situation where the Iron Condor is used is when the trader believes that the stock will go up or down, but just wants to lower the cost of a Straddle. The trader may sell a wide Strangle then to create the Iron Condor with the hope of not capping a move in either direction but reducing some cost.

Sometimes traders call this trade an Iron Butterfly if it uses a Straddle in the middle and an Iron Condor only when both are Strangles.

Long or Short a Risk Reversal

The Risk Reversal is the last of the major combinations we will employ. A bullish Risk Reversal is generally long a call and short a put at the same expiry, and a bearish Risk Reversal is long a put and short a call. The bullish Risk Reversal holder then has leveraged exposure to the stock price in a one-directional bet, up. The trader wins on both the long call and the short put if the stock price rises, and loses on both if the stock price falls. There are many ways to form this combination, and it can go by many names. If the put and call have the same strike and expiry, it is often called a synthetic stock position. This is because as the stock price rises the long call goes up in value, dollar for dollar, at expiry, and below the strike price for the put the short holder is exposed to the downside price action in the stock. If a bearish Risk Reversal is paired with a long stock position, it is called a Collar. The Collar gives downside protection on the stock from the long put below the strike, and the stock can get called away above the call strike. A Collar almost always uses different strike prices and can also use different expiries; most often the call has more time than the put, to have enough value to sell it and buy the put for free or retain a credit.

Risk Reversals are often used either when the stock is in a strong trend with no signs of exhaustion or when a stock is reversing trends. The chart for Con-Way in Figure 9.8 is a good example of a bullish Risk Reversal. Con-Way spent about one month consolidating after a move from 32 to the 37.50 to 40 zone. Breaking higher a trader could buy the stock or a call. An August 40 call would cost $2.65 or an August 42.5 call would cost $1.40, just 6.6 percent or 3.5 percent, respectively, of the price of buying the stock. But if the trader were to buy an August 37.5/42.5 bullish Risk Reversal, buying the August 42.5 call and selling the August 37.5 put, it would cost only 50 cents. If the price moved to 42.50 quickly, the Risk Reversal is likely to be worth about $2.10 versus the August 40 call at $4.40 and the August 42.5 call at $2.65. That is a profit of 320 percent for the Risk Reversal and only 66 percent or 90 percent for the straight calls. This is a pretty powerful tool. Being short the 37.5 put does bring with it added risk. You may be put the stock at 37.5 and it requires margin or the use of a cash-covered put, compared to the straight calls, which have no downside beyond the premium paid.

FIGURE 9.8 Con-Way—Risk Reversal

Another variation is when the long option is a spread in the Risk Reversal. A call spread Risk Reversal, also called a Seagull, has the same characteristics as the bullish Risk Reversal, except that the upside profit potential is capped by the short higher strike calls. Traders would pick this over a bullish Risk Reversal if there is strong overhead resistance and by selling a call near that resistance they can lower the cost of the combination, thus increasing the leverage and profit potential.

The chart for W.W. Grainger in Figure 9.9 is a good one to see the potential for this trade. With the Relative Strength Index (RSI) turning higher and the moving average convergence/divergence (MACD) crossing up as it starts to rise, the price is testing resistance and has an upward bias. A trader could buy the July 250/260 bullish Risk Reversal for 80 cents here, but, realizing the potential for resistance at 268, could also sell the July 270 call and create a bullish 260/270 call spread Risk Reversal by selling the 250 put for a 55-cent credit. The profit is capped at $10 plus the credit and the trader has the same downside exposure on a fall in the price. But since the trade was entered for a credit, the trader also makes a profit if the stock price does nothing for the two weeks until expiry. Entering for a credit also gives the trader a little leeway to cheat on the entry perhaps before the breakout occurs, with a tight stop. Because Risk Reversals use margin, and especially with high-priced stocks where a large downside gap can be costly, some traders will extend this variation one step further, by making the short option into a spread as well.

FIGURE 9.9 W.W. Grainger—Seagull

Conclusion

That completes our tour of options combinations. Do not expect to be an expert after this synopsis but only to have a flavor of the ways that traders combine options. Most options combinations start with a directional bias on the underlying stock and with a simple long or short call or put. The rest are added to manipulate leverage and manage risk to the trader's requirements. In the next part we will dig into how to put all of these pieces together, along with the understanding of the trend providing the current to the market and the specific technicals of the individual stocks driving them. We leave this chapter with a cheat sheet of the combinations and their descriptions.

Covered call or buy write	Buy stock and sell OTM call.
Long a put spread or call spread	Buy ATM call (or put) and sell OTM call (or put) with same expiry.
Short a put spread or call spread	Sell ATM call (or put) and buy OTM call (or put) with same expiry.
Long a ratio put or call spread	Buy ATM put (or call) and two or more OTM puts (or calls).
Long a Calendar	Buy call with distant expiry and sell near call with same strike.
Long a Diagonal	Buy ATM put with near expiry and sell OTM put with distant expiry.
Long a Butterfly	Buy ATM call, sell two higher strike calls, and buy highest strike call with same expiry.
Long a Straddle	Buy put and call with same strike for same expiry.
Long a Strangle	Buy put and call with different strikes for same expiry.
Long an Iron Condor	Buy call spread and put spread for same expiry.
Long a Risk Reversal	Buy call and sell put, usually for same expiry.

This concludes the part on options. There is a lot to take in if you have been a stock trader and have had no previous exposure to options. It is always simpler if I think about options in terms of a set of building blocks. Understand the pieces and then you can start to put them together and understand the whole. The analysis and information in this part comprise far from a conclusive set of tools and definitions in the options space. Remember, we only barely touched on the Greeks. Use the resources at the back of the book to explore further and deepen your learning.

You should now understand the basics of options and combinations, starting with the definitions that create a new language to describe the options contract, like expiry, exercise, assignment, strike, intrinsic value, time value, and more, and continuing to how they trade and whether they are in-the-money or out-of-the-money. You should also now understand how options can be combined to manage risk and leverage, and the lingo that goes along with that.

We are now ready to put this newfound knowledge together with the previous analysis on the trend and on individual stocks to create winning trades using options.

DESIGN AND EXECUTION

You now have a firm grounding in finding the market trend and understanding how it may change. This is important because the vast majority of stocks move with the trend. You also know how to explore the sectors within the major indexes using relative strength and other measures to focus the process of finding potential stocks to trade. We explored many different styles of technical analysis to look for favorable trade setups in stocks—ones where there is potential for a 5 percent or more move in a very short time. And you learned that the more technical views that align toward the same targets, the better the idea can be. You also learned that there can be many outside factors like earnings, news, and short interest that can lead to your deciding to remove a good trade setup from your list if these factors might work against you.

Finally, in Part III you were introduced to the options tools that can be used to enhance the stock trade setups by adding leverage, reducing capital employed, and managing risk. In this concluding part, everything we have discussed will be brought together to create and execute trades. It is organized into three chapters. In Chapter 10 we will discuss the elements of design, including details on position sizing and setting stop losses. Chapter 11, on the trading plan, includes a detailed example of real plans for a week. Chapter 12, "Execution and Beyond," wraps it up with a discussion on proper entry and adjustments for profit taking and hedging. At the end of Chapter 12 you should be ready for release into the wild.

The Elements of Design

As we get started in this part, there are a few terms that will help make the discussion easier to follow. If you were just trading stocks, then it would be easy. You would have only one tool, the stock itself. You either buy it or sell it. That is it. But when you branch out into options, it is like opening your toolbox and seeing a set of Allen wrenches. Yes, they are all wrenches, but there are now so many to choose from. You need to determine which one is the right one: put or call, which expiry, and which strike. Most options combinations start with a directional bias on the underlying stock and with a simple long or short call or put. The rest are added to manipulate leverage and manage risk to the trader's requirements, as discussed in Chapters 8 and 9.

In this chapter we focus on the why of the particular options. Each option for a trade will have a purpose, so we will start by defining those purposes. With that done, we will digress a bit for a discussion on position sizing and setting stop losses. You will learn how these two are intertwined. At the end of this chapter, with the elements of design of the trade behind you, you should be able to identify each element for your trades. You should also be able to determine the proper stop loss and position size for each trade setup.

The Elements

Your first choice in developing an options trade setup is the one option that will be the key to the whole process. It is the call or put you want to own or sell for premium. Let's call this first choice the driver, as it is used to drive the profitability of the trade. It is the call or put option that you want to be long or short no matter what else is going in in the trade. It may be obvious like the at-the-money (ATM) call with the near month expiry, or not so obvious like the three-month-out call 15 percent above the market price. Selecting the driver is the most important decision. It comes from your analysis of the chart and the potential for a move that got you interested in trading the stock in the first place.

Once the driver is determined, the trade setup in the stock can be used to determine how best to select the option or options to reduce the cost of the trade and provide more leverage. These are called the funding options, as they fund or pay for the trade. They lower its cost. This is where an understanding of the combinations in Part III come into play. Knowing which mix of options is best when the chart suggests a quick 10 percent move on a breakout versus a steady rise over the next three weeks or a consolidation with a chance of a move either up or down will make this part of the process easier. Why?

Take a stock that has a projected $8 move in it like State Street in the chart in Figure 10.1. If your driver is the August 70 call, which was offered at $1.55, you need to determine whether the funding option will be a simple August 75 call sale for 31 cents (which cuts the cost by 20 percent) for a call spread. Or will it be a short August 62.5 put for 55 cents to cut the cost by one-third? Or both, to cut more than half of the cost of the driver? The spread fits the parameters of a better than 3:1 reward-to-risk ratio. But the put sale does not cap the upside profit potential and fits the parameters of a funding option by reducing the cost by more than 25 percent. It also takes on margin and the potential to own the stock on a major move lower—more risk.

FIGURE 10.1 State Street—Funding Options

There are more choices, though. Since there are only seven trading days left in the July options in this chart, then the trader might opt to sell the July 70 calls for 75 cents. This keeps the trade uncapped and allows flexibility to swap that July 70 short call for an August 75 call later. It also opens the possibility of selling a shorter-dated July 65 put for 40 cents, a higher strike than the August 62.5 put earlier but with a lot less time for the stock to fall in price. You can see that this can be the most complicated part, reviewing the trade-off between the benefit of funding and managing the risk either removed or added in selling options to fund the trade. And without the benefit of hindsight it is impossible to know which will be the best choice.

In this particular circumstance I would choose to go with a July/August 70 call Calendar spread and sell the July 65 put, for a net cost of 40 cents, or only 26 percent of the cost of the driver. It gives an uncapped trade, if the July 70 call expires worthless in seven days, into August with risk below 65 for only seven days in a market that is rising with a stock that has broken out. The biggest risk at that point seems to be the potential that I will need to buy back the short July 70 call if it goes in-the-money (ITM). I noticed in choosing these July strikes that there is larger open interest at the 65 strike in July on the put side and the 67.5 strike on the call side that may keep the stock from moving too quickly higher. If it is the case that the price does move above 70 before the July expiry, I can always buy the July 70 calls and sell the August 75 calls, converting the trade to a call spread with a short July put. This conversion will likely be for close to no cost if the price moves up slowly as the July option decays faster than

the intrinsic value comes into it and the August option sees relatively little decay compared to the price move related to the intrinsic value. You will grow more accustomed to this part of the process through time.

When the driver and funding options have been chosen, then you must assess the risk remaining in the trade. If necessary, you may need to also select a risk limiter before you are ready to execute. In the July/August 70 call Calendar selling the July 65 put, there is theoretically $65 of downside risk in the trade. If it moves lower during trading hours, then you can just buy back the short put to cut your risk. But if it happens after the close, then you would have no recourse. The stock is not likely to gap down to zero, but 10 percent is not out of the question. And you can often protect for this very cheaply. In this case adding a long July 60 put for 11 cents or July 62.5 put for 18 cents are two choices. You may from your analysis determine that no protection is necessary to limit risk. If you wanted to buy State Street at 64, for example, then the short 65 put can also be viewed as a potential entry. Sometimes switching from the point of view of searching for a combination that will drive profits at an acceptable leverage ratio and capital outlay to one of looking at limiting risk can also lead to a major overhaul of the trade construction. For example, if the risk at 65 for seven days is deemed too much, you may elect to sell a July/August 62.5 put Calendar to protect the downside for seven days against a failed breakout and then take on the 62.5 risk going forward.

There is a lot to absorb in this discussion about the driver, funding options, and risk limiter. I suggest you read it a couple of times and mark up the chart to help you understand the dynamics before moving on to the next section.

Position Sizing and Stop Losses

Position sizing is about risk management. Your first job as an options trader is risk management. Without proper risk management, there is no money left to take care of. So what does position sizing have to do with this? It is at the heart of the matter. This strikes the balance between risk and reward. If your option positions are too big you can get wiped out quickly, and if they are too small you limit the opportunity. So how do you choose the proper size? Like with systems for trading stocks, there is no one right way to determine this. What you need to consider is that along with other factors your sizing criteria need to protect against a crisis and allow for success.

The Process Starts with Goals

One obvious (two-part) goal is to protect against a crisis and allow for success. But that is pretty vague, isn't it? Protecting against a crisis means both not risking too much capital and understanding to the best of your ability where the crisis can come from. The first part is mechanical. The second part comes from practice and gaining skill in the areas discussed earlier in the book. For a top-down technical analyst, this means first assessing the trend and then the influencers to the trend to determine what could change it like we learned in the first part of the book. If the S&P 500 is rising and the U.S. Dollar Index and Treasuries are falling, then there is a strong tailwind for all equities, for example. But if the dollar is rising and Treasuries also start to climb, then stock prices may be at risk.

Next, look at the individual risks in the stock. Those risks for a swing trader include the liquidity in the stock, meaning the number of shares that trade and the typical spread, and whether or not there are options to hedge and how liquid they are. A stock with good liquidity and tight spreads in both the stock and the options can end up looking better than a stock with a massive move potential but little liquidity and no way to hedge. That analysis along with a technical review of potential support and resistance levels leads to an assessment of how much risk it may take to be in a trade.

A stock in an uptrend in a market that is trending higher with good support from intramarket influencers and strong liquidity can be played with greater confidence than the same stock running counter to the market trend.

There is some art and estimation involved in this process, of course. It cannot be helped. With this analysis in hand, sizing a trade becomes mechanical and focuses on combining four factors: portfolio and trade risk tolerance, time frame, technical triggers, and liquidity.

1. Portfolio and trade risk tolerance. This is simply how much of your portfolio you are willing to lose on any given trade and then on the portfolio in total. You can try to control all sorts of risks, but if an overnight gap or halt comes into play, what is your pain threshold? Look at this as a percentage of your portfolio. It may be bigger if you trade infrequently and smaller if you are more active or have many positions. I look to limit the total capital or margin used for a trade to 5 to 7.5 percent of the portfolio, so that is the maximum that a stock trade can lose. But then use a stop loss on each position to measure a worst-case expected

move on a stock trade that will limit a loss to far less. For trading breakouts it is usually a lot less, as the breakout level is a natural stop loss.

For options it is a similar story. You also do not want to have margin from a short option that can destroy your portfolio. I use a limit of 7.5 percent of the portfolio here as well, and for ease of calculation I assume that margin is taken at 10 percent of the short option strike. Long options and options spreads can be very cheap and that would allow for very large positions using 7.5 percent of capital, so I limit them further to 2 percent of capital. This is not the only way to do it, but it works for me.

2. Time frame. What time frame do you trade? Are you a day trader or a swing trader, a position trader or an investor? For our purposes we are assuming a swing trader, someone who will hold positions for a few days up to a couple of weeks on average. Your time frame may be different for different trades, and that is okay. Whatever your time frame is will influence your risk on the position and therefore your position size. This will be crucial for determining where to set your entry and stops. For example, day traders have the risk of a halt in a stock but do not have overnight gap risk, so they might use bigger position limits. A long-term holding may have a wider stop and thus a smaller size.
3. Technical triggers. From your own review of the chart of any particular stock, where are the triggers to enter and exit? How far apart are they? And on what time frame do they work? This will determine how much money you can risk per share. Two stocks with the same price and all other factors equal will have different stops based on support and resistance levels nearby and therefore may also have differently sized trades. If you can lose $1 in a stock before your trade is invalidated compared to $2 in the other stock, it makes sense for the trade with a wider loss potential to be smaller. Strikes on the option come into play in this area as well.
4. Liquidity. You never want to have a position that is more than 5 percent of the recent average daily volume. Unless you are Carl Icahn or Bill Ackman, who frequently have large positions, this becomes important when trading a thinly traded stock or, if you have a large portfolio, when trading a very low-priced stock. Being a large percentage of the daily volume is a problem only when you are trying to

exit fast. You are never trying to exit fast when the stock is moving in your direction, only when it is going against you. And that is always when you are being stopped, not when you are making money. You do not want to be in a position where your desire to sell is depressing the price further.

For a day trader this cap can also be an intraday concern, as volume is generally larger in the first 60 minutes and the last hour than in the middle of the day. For options this can mean a drastic reduction in size. They do not always line up with technical levels and may force you to choose between a strike that is more expensive and more likely to be reached versus one that is less expensive but protects less well.

The options may also have very different volume than the stock itself has. Most stocks trade more shares than options and some are very inactive on the options. But as we discussed earlier, some very high-priced stocks are very actively traded in the options relative to the stock.

These four inputs will combine to determine your proper position size for any given trade. The rest is math. Here is a recap of the simple rules I use.

1. Limit long stock positions to 7.5 percent of portfolio capital.
2. Limit margin usage on short stock positions to 7.5 percent of capital.
3. Limit premiums paid on long options and debit options combinations (spreads, Calendars, Butterflies, etc.) to 2 percent of capital.
4. Limit margin usage to no more than 7.5 percent of portfolio capital on short options positions (sold options, credit spreads, etc.). This is estimated by assuming 10 percent of the short strike as margin.
5. Limit options to no more than 100 contracts where liquidity and other rules allow.

There you go: five simple rules. They of course are tailored to my style of trading, time frame (swing to position), and strategies, and are subject to adequate liquidity.

The chart in Figure 10.2 for SunEdison shows a practical example of a trade I took in July 2013. It was breaking out of a Diamond continuation pattern with resistance higher at 8.75. There was strong potential for a move higher as the move into the Diamond had come from about 4, so a target on the move higher would be about 12.50. It had support for a move higher from the Relative Strength Index (RSI) and the moving average convergence/divergence (MACD) indicator.

Using 8.75 as a trigger and a stop loss level back into the Diamond at 8.30 gives a maximum loss of 45 cents. This is the value to use to assess position size if buying the stock. Assuming a $100,000 portfolio, the maximum position size would be 857 shares at a price of 8.75 (costing about $7,500 or 7.5 percent of portfolio capital). This can be rounded to 800 or 900 shares for a round lot size. SunEdison trades over 5 million shares a day, so there were no liquidity issues in the stock. At 900 shares we were risking $405 or 5.1 percent of the trade size. Understanding that the stock could gap lower, be halted for some accounting issue, or declare bankruptcy the next day and be worth less, that is what the 7.5 percent limit was for. In essence we were risking only 0.40 percent of the portfolio if the stop triggers an exit.

FIGURE 10.2 SunEdison—Stop Loss

We contemplated using the August 9 strike calls instead of the stock. Those were trading at about 60 cents before the breakout. The rules would allow for 33 of the August 9 strike calls (I wish we had done that instead, with the benefit of hindsight), and there was plenty of volume to warrant that size of a trade. If instead we were to use an August 7/9 bullish Risk Reversal, selling the August 7 put (at 16 cents) and buying the August 9 call (60 cents), the total cost of 45 cents would be near what we were willing to risk in the stock trade. But the August 7 put requires margin. Using the rules allows for 107

Risk Reversals since each is assumed to use only $70 of margin against the limit of $7,500. The option size limit would reduce that to 100, and the debit spread size limit would reduce that to 44. Finally, the liquidity would come into play. With a bullish chart and the 7 strike being below a breakdown level, there was not much liquidity to trade it. We might have been able to sell 25 or 30. So for three different potential trades we had sizes of 900 shares, 33 calls, or 44 Risk Reversals.

Never risking more than a small amount of your capital will let you live to play another day. If you risk only 2 percent, then you can lose forever at progressively smaller sizes before you are broke (if the streak gets really long you might consider quitting early, though). The aforementioned process for defining how much capital is at risk is a bit of an art. Armed with your risk analysis and support and resistance levels, you can determine stop levels. This will define your risk, in theory. But because the markets are not continuous 24-hour liquid markets, you are risking more than you might think. This is real life. The one exception is when you are buying options. For a stock with support on a long trade $1 below your trigger, your risk is defined as $1 and you can size your trade according to your capital rules, but a gap lower overnight can destroy that without ever stopping you out. If you spend 50 cents on an option, then your maximum risk is 50 cents even if the stock falls or rises 100 percent.

I started this section by stating that there is no one right way to determine position size, and it is likely that your rules will lead to conflicts at some point, like in the SunEdison case where I could buy more of the riskier Risk Reversals than I could buy of the straight calls. You will constantly review, then revisit, and then refine your position size limits and stop losses over time. Just do not start trading without them.

Conclusion

You should now be able to understand the concept of a driver, funding option, and risk limiter and how these work together. You should also be able to determine the proper stop loss level and how that relates to the position size of your trade. Finally, you should understand how these parameters combine to create trades that allow you to conserve and protect capital while managing risk so that you can continue to trade without one or two trades blowing up your account. Now let's put this all together in a trading plan.

Trading Plan

Now it is time to put all of this together and show how we develop a trade plan. Starting from the trend identification, through security selection, to the actual trade plan for each stock, the process is very detailed. The process to this point is a guide and the plan that follows is the result, starting with the trend analysis. I have abbreviated the normal weekly work to include only the U.S.–centric pieces for brevity. Normally the weekly review would also analyze the Shanghai Composite, emerging markets, as well as the Russell 2000 exchange-traded fund (ETF) (IWM) and the NASDAQ-100 ETF (QQQ). I have also abbreviated the individual trade plans to only five stocks, and have added two earnings plays. These are specific event-driven trades designed to profit from the technical analysis, options activity, and other factors to take advantage of a specific event and are put on the day earnings are reported. Both the trend identification and the trade plan were culled from an actual plan for the week of July 15, 2013. The earnings trades are from the beginning of the second quarter of 2013 reporting period. The analysis for these plans was all done over the weekend after the close on Friday, July 12, 2013, and preceding Monday, July 15, 2013—a tight window.

What to Look For

As you read each set of analysis, look for the details discussed throughout the book. Notice which way the major trend is moving and how it might be influenced. Then, for the individual stock trades, check to see whether they follow the trend. If not, is there a specific reason for that? Remember that each trade setup needs to look at many possibilities so that the trader can adjust as the market changes without much additional work. So there are many different choices that are laid out for each individual stock, including both the stock and its options. See if you can determine the driver and funding options and then risk limiters if they are listed. Most of the individual stock trade setups build the choices from the driver, which may make it a bit easier to recognize. Finally, you may look at the setup and come up with a different trade idea. That does not mean that mine is right and yours is wrong, or the other way around. What is important is that you have a plan in place and execute according to it.

Trend Identification

Macro Week in Review/Preview, July 12, 2013

Last week's review of the macro market indicators, heading into the first full week of July, suggested that the markets were improving and possibly ready to move higher again. We looked for gold to continue its downward move or consolidate in a broad range while crude oil was expected to continue higher. The U.S. Dollar Index also looked to continue to the upside while U.S. Treasuries resumed their move lower. The Shanghai Composite might continue its upward bounce in its downtrend, but the emerging markets were biased to the downside. Volatility looked to remain low and drifting lower, keeping the bias higher for the equity index exchange-traded funds (ETFs) SPY, IWM, and QQQ. Their charts showed that the IWM was the strongest and ready to continue higher while the SPY and QQQ still had some resistance to work through in their short-term moves higher before they were in the clear to move higher.

The week played out with gold deciding it did not like those choices as it moved higher while crude oil also moved up, before consolidating to end the week. The U.S. Dollar Index met resistance and broke lower while Treasuries consolidated under resistance. The Shanghai Composite started higher out of consolidation while emerging markets jumped and held their gains. Volatility continued to fall back to lower lows, creating a bullish environment. The equity index ETFs responded by moving higher, with IWM making new all-time highs, the QQQ new 13-year highs, and the SPY closing in on a new high as well. What does this mean for the coming week? Let's look at the charts in Figures 11.1 through 11.12.

FIGURE 11.1 Gold Daily

Gold found some footing and moved higher during the week, stalling at the 20-day simple moving average (SMA). The Hanging Man candle followed one with a long upper shadow; it could be topping and ready to reverse again. But there are a couple of potential bearish Harmonics in the works that point to more upside first. In Figure 11.1, a Butterfly (green, right side and shorter) has a potential reversal zone (PRZ) at 1333, and a Bat (pink, right side and higher) has a PRZ at 1366. The daily chart also had a bullish Crab (blue, further left) complete and retrace to near the first reversal target at 1292. The second target at 1362 is right in the same zone as the bearish Harmonics—quite a Harmonic confluence. The Relative Strength Index (RSI) is rising but has yet to cross the midline and get bulls more excited, while the moving average convergence/divergence (MACD) indicator is rising. Both support further upside. The weekly chart (Figure 11.2) shows nascent signs of a reversal as well. The long-tailed candle of three weeks ago was followed by a small body candle lower and then a reversal long (green or white) candle this week. The RSI is moving back above the technically oversold level, but the MACD is yet to turn. There is resistance higher at 1300 and 1328–1340 before 1360 and 1400. A move over 1400 will attract more bulls. Support lower is found at 1260 and 1200 before 1180. Outlook: Continued move higher in the downtrend.

FIGURE 11.2 Gold Weekly

Crude oil moved higher early in the week before consolidating over the previous resistance/support level at 104.82. The daily chart (Figure 11.3) looks like it could use some time here as it has an RSI that is now technically overbought and an MACD that is reaching extreme levels on the daily chart. The weekly picture (Figure 11.4) looks strong, though, continuing the breakout of the symmetrical triangle toward the target of 117.50. The RSI on this time frame is bullish and rising, with an MACD that is also rising, and both have some room to go. There is resistance higher at 108 and 110 followed by 114 before crude oil can take a run at the high from 2008. Support under 104.82 comes at 100 and then 97. Outlook: Consolidation or more upside in the uptrend.

FIGURE 11.3 West Texas Intermediate Crude Daily

FIGURE 11.4 West Texas Intermediate Crude Weekly

The U.S. Dollar Index had a hard smack-down after the Bernanke speech, reversing from multiyear highs (Figure 11.5). It held over the 50- and 100-day SMAs to close the week, but the two candles had some long topping tails, indicating some further downside. The

RSI is at the midline after heading lower, with an MACD that is falling and has just crossed. On the weekly view (Figure 11.6), the Bearish Engulfing candle takes your eye. An omen for more downside if confirmed next week, it is supported in that vein by a falling RSI and an MACD that is running sideways. There is support lower at 82.60 and 82 followed by 81.20 and 80.60. Resistance higher is found at 83.40 and 86.20 before 88.70. Outlook: Continued downside.

FIGURE 11.5 U.S. Dollar Index Daily

FIGURE 11.6 U.S. Dollar Index Weekly

U.S. Treasury bonds, as measured by the ETF TLT, held support at the gap down from last week, creeping a bit into the gap before falling back. The daily chart (Figure 11.7) shows the falling 20-day SMA giving the road map lower as it moves in spurts. The failed move higher Friday bodes for more downside if confirmed Monday, and it has support from the RSI that cannot get over 40 as it levels, and an MACD that is trying to level off in its fall. Maybe it will hold. The weekly chart (Figure 11.8) suggests if it holds this would be a good place. The (blue) box has held twice before, and there is support from an RSI that is hitting the technically oversold level, also a good place to bounce. But the RSI is bearish and the MACD looks like it has no plans to reverse anytime soon. There is support lower at 105 and 100 followed by 97 and 91.50. Resistance higher comes at 108 and 110 followed by 112. It needs to prove any reversal. Outlook: Continued downtrend.

FIGURE 11.7 iShares Barclays 20+ Year Treasury Bond Fund Daily

FIGURE 11.8 iShares Barclays 20+ Year Treasury Bond Fund Weekly

The Chicago Board Options Exchange (CBOE) Market Volatility Index (VIX) put in an important week, closing back below all of the SMAs. The last four times this has happened have led to new all-time highs in the S&P 500, and it took only two days for that to happen this time. The SPY has yet to make a new all-time high, though, so there

may still be more to come. The daily chart (Figure 11.9) shows the RSI moving into bearish territory for the first time since late March 2013, with an MACD that is starting to level on the histogram. The weekly picture (Figure 11.10) shows a strong move below support and the SMAs with a falling RSI and MACD. The prospect is for lower volatility. There is support at 12.40 and 10, with resistance at 15.67 and 18 followed by 22. I maintain the view that the VIX should be ignored until it closes above 22. Outlook: Continued low volatility.

FIGURE 11.9 VIX Daily

FIGURE 11.10 VIX Weekly

The SPY continued the move higher over the SMAs and the trend support/resistance line from the November 2012 low. It has the look of a possible Shark Harmonic, but the low at 155.73 went beyond the 161.8 percent limit of the extension lower. The week ended with a Doji Star, signaling indecision, just below resistance at 168. The RSI on the daily chart (Figure 11.11) is rising and bullish and the MACD is also rising and bullish. On the weekly chart (Figure 11.12), the strong candle is watered down a bit by the gapping nature of the rise, looking more like an Advance Block than Three Advancing White Soldiers—a potential trend exhaustion. The RSI is moving higher, though, and so is the MACD, so there is a bullish bias. There is resistance at 168 and 169.07 before free air and new all-time highs. An extended RSI positive reversal could see it hit 171.25 above that. Support lower comes at 166 and 163 followed by 161.60. Outlook: Continued upside with a possibility of consolidation.

FIGURE 11.11 SPY Daily

FIGURE 11.12 SPY Weekly

Heading into next week, the markets look strong but maybe a bit extended. Look for gold to continue higher in the downtrend while crude oil slows at resistance in the uptrend. The U.S. Dollar Index looks to continue lower, along with U.S. Treasuries. The Shanghai Composite and emerging markets are now biased to the upside in their downtrends and have potential to reverse those trends with continued strong moves.

Volatility looks to remain low and drifting lower, keeping the bias higher for the equity index ETFs SPY, IWM, and QQQ. All are biased higher, with the QQQ looking the strongest, the IWM and SPY perhaps extended a little in their uptrends.

This trend analysis gives an upward bias to the market, so individual stock trades should all be biased higher as well.

Trade Plans

Top Trade Ideas for the Week of July 15, 2013: The Best

BroadSoft (BSFT) took a tumble to start March but recovered and has been consolidating between 26.50 and 31.05 for the past two and a half months. (See Figure 11.13.) Rising along the 50-day simple moving average (SMA), it is approaching the top of the channel with support for a break higher from a rising and bullish Relative Strength Index (RSI) and a moving average convergence/divergence (MACD) indicator that is starting to move up. There is resistance higher at 33.50 and 35.10 followed by 36.75 and 39. Support lower comes at 28.20 and 26.50 followed by 24.75 and 23.40. Short interest is elevated at 12 percent and could help BSFT higher out of the channel. Enter long on a move over 31.15 with a stop at 30.50. As the price moves over 32.10, convert the stop to a $1 trailing stop and take off one-third at any stall over 39. As an options trade consider the August 30 calls (offered at $2.55 late Friday) on the same trigger, and trade them like the stock trade. As a low-cost levered trade, consider the August 25/35 bullish Risk Reversal (45 cents).

FIGURE 11.13 BroadSoft (BSFT)

Deckers Outdoor (DECK) has been moving higher and is approaching resistance at 56.50. (See Figure 11.14.) It has support from a rising RSI and MACD for more upside. The short interest can also help at over 29 percent. There is resistance higher at 59 and 60.40 and then free air. Support lower is found at 52.50 and 50.55 followed by 48. There is also a large relative open interest (OI) at the July 57.50 call, which could lead to a pin there Friday. In options lingo, a pin is when large OI at a particular strike acts as a magnet to keep the stock price at that strike at expiry or to draw it to it. If it really gets going, there is also large OI at the 65 call well above. Enter long on a move over 56.50 with a stop at 54. As the price moves over 57.50, convert to a $2 trailing stop and take off one-third at any stall over 60.40. With all that short interest, you do not want to cap the upside on any option trade beyond this week. As an options trade, consider the July/August 57.5 call Calendar ($2.30) or the August 57.5 ($2.60) calls alone. Offset some cost by also selling the August 47.5 put (85 cents, or $1.75 net on the resulting bullish Risk Reversal). The July 56.5/57.5 1×2 ratio call spread (10 cents) is a good way to play for a pin at 57.5. Hedge that bet by also buying the July 58.5 call (20 cents) to turn it into a call Butterfly.

FIGURE 11.14 Deckers Outdoor (DECK)

MBIA (MBI) is starting to move higher out of long, slow pullback. (See Figure 11.15.) The RSI never moved into bearish territory during the pullback and is rising again, with an MACD that is also turning higher. Short interest is near 8 percent and could help MBIA higher. There is resistance at 14 and 14.40 before 16, with a measured move (MM) to 19.50. Support lower comes at 13.10 and 12.40 before a steep fall. Enter long on a move over 14 with a stop at 13.65. As the price moves over 14.40, convert the stop to a 50-cent trailing stop and take off one-third at any stall over 16. As an options trade, consider the August 14 calls (81 cents) and trade them like the stock trade. Sell the August 16 calls (23 cents) in one-third size to recoup some cost, and you can consider also selling the August 12 puts (21 cents) if you are comfortable owning the stock at 12.

FIGURE 11.15 MBIA (MBI)

Boston Scientific (BSX) is approaching the top of a consolidation channel, tightest between 8.92 and 9.45 but up to 9.75. (See Figure 11.16.) The RSI is bullish and making a new high as it rises, with an MACD that is about to cross to positive. A break of the channel carries a target of 10.60 and then a measured move higher to 11. There is support lower at 8.90 and then 7.95 and 7.65. Enter long on a move over 9.75 with a stop at 9.35. As the price moves over 10, convert the stop to a 40-cent trailing stop and take off one-third at 11. As an options trade, consider the August 10 calls (23 cents) and trade them like the stock trade. Offset the cost by selling the August 9 puts (15 cents) for a bullish Risk Reversal.

FIGURE 11.16 Boston Scientific (BSX)

Diamond Offshore Drilling (DO) is in a Deep Crab Harmonic, with a potential reversal zone (PRZ) at 82.57. (See Figure 11.17.) The RSI and the MACD are bullish and rising, supporting further upward price action. There is resistance higher at 73.20 and 75 and then free air. Support lower is found at 70.90 and 69.66 followed by 69, 67.80, and 66.40. Enter long now (over 71) with a stop at 70.50. As the price moves over 73, convert to a $1.75 trailing stop and take off one-third at any stall over 82.50. As an options trade, consider the August 72.50 calls ($1.54) and trade them like the stock trade. Offset some cost by selling the August 67.5 puts (47 cents). You can also consider an August 75/September 74.25 call spread (selling August and buying September, 92 cents).

FIGURE 11.17 Diamond Offshore Drilling (DO)

Earnings Trade Plans

Wells Fargo Earnings Trade (chart shows post set up price activity)

Wells Fargo (WFC) is pulling back in what could be a second bull flag out of the consolidation over 39.60. (See Figure 11.18.) The measured moves of $2 would take it to 43.50 if it were to move up from here and would also complete a Three Drives pattern. The RSI is on the verge of moving through the midline the wrong way, though with the MACD indicator about to cross down ahead of the reporting day noted in the chart. And the longer red candle is also a downside omen. This all gives a downside bias in the short run. Support lower comes first at 41.5 and then the 40.80 and 39.60. There is resistance at 43 and then some room to run. The reactions to the past six earnings reports have been moves of about 1.95 percent on average or $0.82, making for an expected range of 40.90 to 42.65. The at-the-money weekly July Straddles suggest a larger $1.15 move by expiry Friday, with implied volatility (IV) at 59 percent, above the July IV at 29 percent and the August IV at 21 percent.

FIGURE 11.18 Wells Fargo (WFC)

Trade Idea 1: Sell the July 41/42 Strangle for a $1.00 credit.

Trade Idea 2: Buy the July/August 43 call Calendar for $0.26.

Trade Idea 3: Buy the August 43/44 call spread, selling the July 43 call, for free.

Trade Idea 4: Buy the August 43/44 call spread, selling the July 26 weekly expiry 40 put, for free.

Trade Idea 5: Buy the July 12 weekly expiry/July 43 call Calendar for $0.13.

I traded #4.

Wolverine Earnings Trade

Wolverine World Wide (WWW) broke out of a bull flag in late June and moved higher. (See Figure 11.19.) The measured move (MM) takes it to 58 from that break but the recent pullback also reinforces that with a new MM higher to 58 as well. The RSI is bullish, with the MACD indicator rising—an upside bias even if it pulls back first. Support lower comes first at 52 and 51 before 50. There is no resistance above today's high at 55.95. The reactions to the past six earnings reports have been moves of about 4.27 percent on average or $2.37, making for an expected range of 53.10 to 57.95. The at-the-money July Straddles suggest a larger $3.00 move by expiry, with implied volatility at 40 percent above the August IV at 30 percent. Short interest in this name is elevated at 10 percent.

FIGURE 11.19 Wolverine (WWW)

Trade Idea 1: Buy the July/August 60 call Calendar for $0.50.

Trade Idea 2: Buy the July 55 call for $1.90.

Trade Idea 3: Sell the July/August 50 put Calendar for a $0.10 credit.

Trade Idea 4: Buy the stock and Collar with a July 55/50 put spread and a short August 55 call for a $1.00 credit.

I traded #1.

The trend identification write-up shows gold and crude oil biased higher. It also shows the U.S. Dollar Index and U.S. Treasuries biased to continue lower, with volatility continuing to be low and drifting lower. These put a breeze to the back of the equity index ETFs and particularly the SPY. But the short-term action in the SPY itself suggested that it may be ready for a pullback. This sets up a bias higher in the market, with tighter stops in existing positions and quicker profit taking. It also suggests that a pullback is likely a short-lived event. This could all change the next week, but that is how you would approach the current week. You could of course corroborate this with other indicators discussed in Part I to refine the view.

With the trend in hand, then the process in Part II is used to identify the stocks listed in the trading plan. This is the most time-consuming part of the process. It can take eight hours if you look at

every stock individually like I do, or much less if you use scans to narrow the search. Adding in the analysis from the options chains, triggers, and profit and stop targets completes the plan. You will notice that each trade has an initial stop loss and then plans for adjusting that to protect profits. We will dig further into that in the last chapter.

Conclusion

With the full plans in place, we can now walk through the execution and then any adjustments during the trade to hedge, create more profits, or cut losses. Remember that not every trade will trigger. In fact, you may have a week when none of them trigger. You may also have a week when all of them trigger at the same time on Monday. You do not have to take every trade that comes along. The next chapter will start with the execution.

Execution and Beyond

To get to this point has taken a lot of work. You have identified the trend, sought out good trading setups, and written plans that can be used for stocks and options. The plan is set. In this chapter we discuss what to do with the plan—not only how and when to enter the trade, but also how to adjust it and when to take profits. This will need to be an on-the-job learning experience for you. No matter how well thought out and detailed your plan is, there will be details that you could not have anticipated. Did the stock trigger and then reverse but not to your stop and then stall the rest of the day? What do you do? Or perhaps you enter a stock and it hits your first target and reverses before you can move up your stop. Do you take profits?

I cannot give you an answer for every situation, and you cannot plan for them all. You just need to do the best you can to prepare so that there are as few unexpected situations as possible, and over time you will become more comfortable with how to deal with them. So let's go to the first steps.

Execution

Now what? You wait. You wait for a stock to move and to trigger—the stock that you have spent hours selecting and culling from the broad universe and then writing a detailed plan for. And there can be a lot of waiting. But there are things to do as you wait. You can set price alerts for your watch list. You can set up the options spreads you are considering to trade in your trading system. Then wait some more. After all this work over the weekend, there is an urgency to trade when the market opens. But there are also millions of other professionals and nonprofessionals alike who have been waiting for the opening bell so they can execute that first order. Some have been waiting since they noticed a company in the news Friday evening. Some have their weekends away from their daily job and only then get to see how to adjust their plan. Some see events during the weekend that influence their decisions to buy or sell a stock. But don't trade along with them.

Rule #1 for trading: Do not trade in the opening minutes of the day. This pent-up demand can create a frenzy the first 30 to 60 minutes on Monday. And the whole process is repeated to a lesser extent, 30 minutes or so, at the start of every other day of the week. Often the moves in this time period do not hold. However, I have three exceptions to the "do not trade the open" rule. The first is if I am taking a profit. The frenzy can be the perfect place to feed your positions to the unwitting and take your profits. The second is if I am looking to day trade a stock, holding it for only a matter of minutes. The third is for later.

Now that it is 10:30 or so, the waters will have cleared and it is time to wait for your triggers. If a stock has triggered in the opening period and has held up, with a sideways consolidation or a pullback to the trigger and then reversed again, you can trade it right away. If it triggered and failed, then keep an eye on it for the next trigger to enter. This is where the third exception to trading the open comes in. A stock that triggers and fails one day can be played early the next day if it triggers during the opening period.

There are several methods of entering the trade. For a long trade you can bid on the offer side of the market for the full size of your trade if it is small compared to the offer size. If you are looking to trade 1,000 shares or 25 contracts in Bank of America, for example, go for it all at once. That same size trade in a stock that trades only 500,000 shares or 100 contracts per day will require you to build into it. Check the size of the bid and ask and the level 2 market depth (the

full book of bids and offers at each price) if you have access to get a better feel for this.

In either case use a limit order, not a market order. A market order may be fine for 500 shares of Bank of America, a stock with penny spreads in the bid/offer and thousands of shares on each side. But a smaller stock with a 5- or 10-cent spread (yes, that happens) or even a high-priced stock like Google with an even greater spread can cost a lot if you use a market order instead of a limit order. High-frequency trading (HFT) algorithms are designed to exploit that, among other things. If you use a limit order, then you know the most you will be paying. If you are trading options, then limit orders are a double must, as the liquidity in any one particular option can go to zero in a nanosecond, leaving any market order exposed to a horrendous price spike.

As you get more experience, you will start to see that your technical analysis on the daily and weekly time scales can also be applied to shorter three- or five-minute time frames, and you will use them to help better plan an entry. Identify shorter time frame support and resistance on the fly that can be used to amend your plan. You will also likely start trying to split the bid and offer, especially in wide options combinations, to lower your cost.

As your trades execute, I suggest that you immediately enter a stop loss. Some traders will tell you that doing this is a recipe for the HFT algos to hunt for your stop. That could be true, but entering it immediately shifts the decision in your mind from “Do I stop it now or give it a few more cents?” to “Will I take action so as to allow myself to lose more than my plan?” As you watch the price move against you in the former, human psychology starts you thinking that you can make it back. You won’t, so do not head down that road. The latter is more like walking to the edge of the cliff and while you are there, secure behind the fence, deciding you want to jump and see how badly you get hurt. Keep this analogy in your head, and I promise you will not move a stop.

As a practical matter, placing a stop immediately also allows you to do things like go to the bathroom, make lunch, take the kids to school, or talk to your spouse. Many trading systems allow you to attach a stop loss to the initial trade, and if yours does, then use it. For options this is not always possible. I prefer using the direct instrument itself for a stop, given the short-term nature of most trades. This means that if the stop is at 920 in the stock in Google for a July 930 call option, then your trading system will need to have conditional stops allowing you to stop the options trade on a trigger in the stock price. What is more likely is that you will need to set an alert on the stock at the stop price and then manually stop the option. Expect some

slippage on options stops unless you are trading straight calls or puts on a very liquid strike. S&P 500 options trade at penny spreads, but not many others do.

Let's look at the Deckers Outdoor trade from Chapter 11 to walk through as a practical example (see Figure 12.1). The first thing that comes up is that we identified at least six potential trades to take if the stock triggers over 56.50. How do you choose? It stated in the plan that with high short interest we did not want to cap any upside potential and that the move higher could be significant from the open interest. In that case we would give the last trade the July 56.5/57.5 1 × 2 call spread a low weighting and save it until Friday (expiry) if it had not triggered yet. The call Calendar also works best later in the week when it is more certain that the July strike will not have to be bought back. This leaves the August 57.5 calls, the August 47.5/57.5 bullish Risk Reversal, or the stock. With the first pricing at $2.60 and the Risk Reversal at $1.75, since this is a book about options we will choose between them.

FIGURE 12.1 Deckers Outdoor

Now ready for the opening period, we see from the chart in Figure 12.1 that the stock has gapped higher in the premarket, well over the trigger. All your work is useless. Well, not really. There is still the same resistance higher and support below; just the prices have changed. Using the bullish Risk Reversal, instead of being able to buy it for $1.75, by the time 10:30 rolls around it is quoted at $2.75, a dollar higher. With a first profit target over 60.40, this is still a good

reward-to-risk ratio. And since the price is above 57.50, the stop has now moved to a $2 trailing stop. So by the time you enter, with the stock at 58, the stop is now at 56. This may mean you need to adjust your trade size according to the rules due to the higher premium. The 15 contracts allowed for a short 47.5 strike put using a $100,000 portfolio and the previous sizing rules does not change, but the 2 percent of capital used for premium will reduce the trade size from 11 contracts to seven contracts. You may also do some additional analysis on the fly to determine if you wish to adjust the trade before entering it, with either a higher call or put strike, for example. More on that later.

You have now started to learn something about trading. It can take a lot of patience for a trade setup to trigger. It can also trigger and then spit you back out in an hour. The BroadSoft idea did this. Or it can never trigger, like Boston Scientific or MBIA for the week of this plan. But now you are in the stock or options. The execution phase is over and it is on to the maintenance of hedging, profit taking, and adjustments.

Hedging, Profit Taking, and Adjustments

You are in the trade now, feeling good, and time is rolling forward. This can be the hardest part of a trade. You have a stop loss in place and a target for taking profits, but the stock you are trading and the options combination you are in are running in place. Time keeps ticking. What are you supposed to do, just wait? If you are in the stock, then yes! But for us options traders, there is always something to look at that might be adjusted. The reason for that is the time decay, or theta, that takes your positions to zero over time if nothing happens. Adjustments to trades generally take the form of three varieties: hedging, profit taking, or straight adjustments to be able to hedge or take profits later, in a sense buying time. Let's look at all three.

Hedging

Whether it happens shortly after you enter the trade or much later, you will invariably run into a situation that requires hedging. This does not mean you are losing. Hedging is simply protecting the current position, so it can also apply to protecting profits as well as preventing further loss. So listen up.

There are many ways to hedge you position. The first question to ask is: When do you want to hedge? Actually, you are hedging from your first entry into a position if you are using a stop loss. This is your first form of hedging. But sometimes you may be in an options position that moves in the after-hours market. Since options trade only during market hours, between 9:30 and 4:00 p.m. Eastern time, then you may need to use stock. When hedging, you can use stock or options or a combination. I like simplicity and the ability to act at all hours, so my preference is stock. If you are net long in either a stock or an options combination, hedging by selling stock short is the best way to go. For the opposite, if you are in a short position, then you will need to buy stock to hedge. It gives a perfect 100 percent correlation, or delta, with the move you are trying to protect against, and is usually more liquid than any other option, unless the stock you are hedging is restricted or hard to borrow. Then you are limited to using options to hedge.

You should have some sort of hedge going when the position is first entered with either stock or options. If you are at this point and need to use options, a quick technical analysis review, along with a look at the options chain for clues about support and resistance from the open interest, is what you need to determine how to hedge. What you are looking for is which strike to use over the course of your trade to protect the initial thesis. As stated earlier, this may be to protect gains (for an earnings event or news cycle) or to prevent further losses, so it is worth a fresh look at the chart.

Practically speaking, if you are up $4 in a $20 Google call spread as Google heads into an earnings announcement, you have many choices. First, you can sell short the stock. If your call spread is the 910/930 call spread with the stock at 920, then you can buy out month puts at the 920 strike (they will not exhibit time decay) or sell 930 calls in an outer month, or do both. Using options for an outer month concentrates any move in the stock to the price movement and less to changes in volatility and to changes in time to expiry. Oh yeah, you can also just book the profits.

The hedge should be taken off when the price is finished moving

against you. If it were only that easy, like it raises its hand when it is done hurting you. Technical analysis, usually on a shorter intraday time frame, can help discover when this is happening, although in the end it is a guess. The tendency is to leave the hedge on for too long, and that is understandable from a human psychology standpoint; you do not want to be in that losing position again. But when the trend has changed on the shorter time scale, then it is time to take it off. This does not mean that you will not have to do it again. Constantly be prepared to hedge.

Let's look at a real-life example from a trade done for the earnings report on BlackBerry, at the end of June 2013. Figure 12.2 shows the setup prior to the report.

FIGURE 12.2 BlackBerry (BBRY) Hedge

BlackBerry (BBRY) has been moving in a six-month-long symmetrical triangle, ever tightening. Today sees it building a bearish engulfing candle early, just above the flat simple moving averages (SMAs) before the report Friday morning. The Relative Strength Index (RSI) is on the verge of moving into bullish territory, with the moving average convergence/divergence (MACD) indicator turning up—a short-term upside bias. Support lower comes first at 14 and 13.50 before 12.60 and 12.15. Under 13.50, it carries a measured move (MM) lower to 7.50. There is resistance at 15 and 16 followed by 16.50 and 17.20 before 18.20. Over 15.50 the MM higher is to 21.50. The reactions to the past six earnings reports have been moves of about 12.03 percent on average or $1.81, making for an expected range of 12.75 to 16.50. And short interest is very high at 35 percent.

The at-the-money June weekly Straddles suggest a similar $1.70 move by expiry with implied volatility (IV) at 250 percent, well above the July monthly IV at 83 percent and the August IV at 67 percent. Options volume favors the upside with 8,333 September 17/18 call spreads trading on the offer, and 1,000 August 25 bullish risk reversals.

Trade Idea 1: Buy the June 15/16 call spread and sell next week's 12.5 put for a $0.03 credit.

Trade Idea 2: Buy the August 15 Straddle, selling the July 5 14/15.5 Strangle for $1.60.

Trade Idea 3: Buy the June 15/July 5 16 call spread and sell the July 5 12 put for $0.05.

Trade Idea 4: Buy the July 5 15/16 call spread and sell the July 5 12.5 put for $0.10.

I took trade #4 for a cost of 12 cents.

Looking with hindsight, maybe you would give a different interpretation of the setup, but it happened. The next morning was an utter disappointment with an immediate sell-off. The premarket action (prior to 9:30 a.m.) is not shown on the chart, but there was a quick, nearly immediate reaction below the symmetrical triangle. Being short the July 5 12.5 put required immediate hedging to limit the loss. I was able to short the stock at 11.60 as it ticked lower. By the time the market opened, it was trading at 10.71, with the hedge paying off, limiting a loss to 90 cents. But at that time the price action in the stock was just horrible. I closed the July 5 12.5 puts at $1.85, leaving the short stock position open and essentially booking a loss of $1.95, expecting the stock to continue to move lower from the technical analysis. The break of the triangle carried with it an expected move lower of $6.10, the widest part of the triangle, which would take the stock to 7.65. My breakeven for the trade was then a stock move to 9.65. At that point I could cover my short at breakeven for the trade with the gain on the short equaling the loss on the put. As the stock touched 9.50 it stalled and I closed 30 percent of the short there. On a dip lower to 9.10 a week later I closed 50 percent, and then was stopped on the remaining 20 percent of the short a few days later as it bounced to 9.37. The average price to close the short ended up being 9.274, so I booked a gain on the entire trade of 37.6 cents. When life gives you lemons, make some lemonade.

The point of including this example is twofold. The first purpose is to show the importance of hedging. With no hedge and a best-case close at the open, the loss on the trade by closing the puts would have been the full $1.95. The hedge limited that to 90 cents. Second, by

understanding the technical view you can often adjust the trade and turn a clunker into a winner. When you are wrong, close quickly, but also reassess the situation.

Profit Taking

You already have profit targets from the trading plan and can follow them. That is the easy part. But sometimes you need to adjust the plan on the fly as the price action gives you signals. One example of that happened in a trade idea that was originally planned for July 8, 2013, in Ironwood Pharmaceuticals. Figure 12.3 shows the trade.

FIGURE 12.3 IRWD Profit Taking

The trade in Ironwood Pharmaceuticals (IRWD) was a bottoming reversal play. IRWD was making a double bottom at 10 and turning higher. The RSI was turned up and the MACD was about to cross to positive territory. The price was more than 20 percent below its 50-day SMA and had 18 percent short interest to help it if it could get started higher. There was resistance at 10.50, 11.35, and 12.50 followed by 13.80 and 14.40. The plan was to enter long on a move over 10.50 with a stop at 10.25. As the price moves over 10.80, you convert the stop to a 30-cent trailing stop and take off one-third of the position at any stall over 13.80. You can also consider a partial position as a July 10 buy write, buying the stock and selling the July 10 call (70 cents) for a 2 percent return if called in two weeks using the Friday close on the stock. Another alternative would be to add a July 10/August 12.5 Collar (free) to the stock position for protection to the downside for two weeks and still a potential for a 19 percent return at August expiry if it squeezes higher.

Whichever trade was taken, it called for no profit taking until a touch at 13.80. The trailing stop would have had you selling the stock at 11.54 for a smart gain on the day of the Shooting Star. But what if you did not adjust your stop yet? The signs in the chart also suggested taking profits, at least some, well before it could get to 13.80. The Shooting Star, being confirmed lower the next day with an RSI that leveled under the midline, failing to move into bullish territory, and an MACD that had also leveled on the histogram should be enough to convince the trader to place a tight stop or take profits. All of these signs point to a reversal, or at least a consolidation. Don't let a winning trade turn into a loser because it did not reach your profit target. Use the stops but also continue to watch the chart. If the stock turns, go ahead and sell some of your position to take profits.

Adjustments

You spent a lot of time creating a trade plan, so it may seem counterintuitive to start looking for ways to adjust it right away or shortly after the trade is entered. It is not always necessary. If you are buying a stock with options or the stock directly for a breakout move higher and it does that and just continues, your plan likely does not need any changes. But what if you get into a position and it moves against you, but not to your stop? This could be an opportunity to adjust the trade to improve it. A real-life example might help here as well.

Campbell Soup (shown in Figure 12.4) had been a darling of the market from June 2012 until May 2013. A big 14 percent pullback into mid-June presented an opportunity for a trade. Getting long the stock on June 7 at 43.75 using a stop at 42 seemed a good long-term plan. The RSI had dipped and was turning back up and the MACD was improving. All looked well until the June expiration. Three days ahead, the stock fell from a high of 45.65 to 42.83 as open interest lower may have pulled it down. The stop had not triggered but it did present an opportunity to adjust the trade. With the stock lower, it was time to look at adding options to leverage any pop higher. One of my favorite adjustments to a stock that is in the hole but looks headed higher is a 1×2 call spread. This fit Campbell Soup perfectly. I added a July 44/46 1×2 call spread for free. This can be looked at as adding a covered call to the stock trade, and a call spread alongside. Because it was free, this meant that if the stock rose to 46 by July expiry I would be called away on the stock at 46 but have a $2 gain on the call spread as well, so the net sale price would be 48. I would have a $5.15 gain on a $3.15 move in the stock.

FIGURE 12.4 Campbell Soup—Adjustments

These types of adjustments are often available for free or even a small credit sometimes. Of course if the stock does not move or falls they are worth nothing, so it is important not to pay much for them. But it does illustrate that there are situations where a drop in a stock may open an opportunity that did not exist just a dollar higher.

Conclusion

This chapter starts to give you a real feel of what trading is like. It is lots of work and planning followed by patience to sit around and wait for a trigger, so that you can enter a trade and immediately look to adjust the plan that took you so long to create. You should have a sense of when to avoid the market and then how to deal with your triggers on stocks that decided not to wait. You should also understand the concept of hedging at multiple levels and how you might incorporate hedges into your trading. I hope that this chapter also instilled the knowledge that the trade is not over until you have closed out all aspects of it. It can always reverse in your favor or against you, and you need to be open to exploring the technical setup constantly to be able to adjust and take advantage of the new situation.

There is a lot of information packed into this book, all to try to help you be better prepared to trade stocks and especially options using technical analysis. Trading is a process, and like any process, the more prepared you are and the more practice you get, the better you can be at it. I started this book with a quote from Seneca—"Luck is what happens when preparation meets opportunity"—and have written the chapters from that perspective. You want to be ready to trade and be prepared to take advantage of any luck that the market gives you. You now have a sense of what it takes to be prepared, at least to trade from a technical perspective.

The first part of the book, "Identifying and Understanding the Trend," started the process. We explored how to identify the major trend and what influences it in Chapter 1. This is important because 70 percent or more of all stocks move with the trend. We then explored the sectors in Chapter 2, one layer deeper into the onion of the market structure to see where to focus. With just these two processes mastered, you are prepared to make the biggest decisions of your investing and trading life, answering the question "Which way is the market moving and how do I use that information?" If you have gotten nothing else out of this book but an understanding of how to identify the trend and profit by trading with it, then I have succeeded in my endeavor. But there was a lot more.

In Part II, "Technical Analysis for Identifying Individual Stocks," we dug deeper into the market. In this part we delved into four types of technical analysis. The first area, in Chapter 3, was classical technical analysis, the study of support and resistance and of patterns. We then moved into the world of Japanese candlestick formations in Chapter 4. Next followed the methods based on rhythmic flows like Fibonacci retracements, Harmonic patterns, Elliott Wave principles, and Andrews' Pitchfork, and more, in Chapter 5. In Chapter 6 we closed with technical tools based on price derivations like momentum

oscillators and moving averages, as well as volatility-based analysis. With these sets of tools we then learned to create the trading watch list and trading plan in Chapter 7. At the end of Part II, you could apply your new knowledge to study charts using these multiple methods to create a mosaic of a stock and determine its viability to trade, and then script a plan to execute using that stock. If you are going to trade stocks at all, you need to continue to repeat this process.

We moved into options strategies in Part III, starting with some options basics. This part was the first step in adapting all the prior analysis to design options trades. We started with some definitions in Chapter 8 to gain an understanding of the tools available. We then worked through numerous combinations of options in Chapter 9 that can be built into strategies to manage leverage, risk, and cost.

We got to Part IV, "Design and Execution," with a firm grounding in finding the market trend and stocks to trade with it, and completed the preparation by adding an understanding of how options tools can be used to enhance the stock trade setups by adding leverage, reducing capital employed, and managing risk. In this final part, everything we had discussed was brought together for the creation and execution of trades. Chapter 10 gave a discussion of the key roles in this process: the driver, funding options, and risk limiter. We then moved on to a detailed discussion of position sizing and setting stop losses. Chapter 11 then showed examples of a complete weekly trading plan, and Chapter 12 wrapped it up with a discussion on execution and adjustments for profit taking and hedging.

This process is time consuming and arduous. It is also boring most of the time. But it is what it takes to be prepared. And being prepared means eliminating as much uncertainty as possible. This leaves you with the opportunity to take advantage of circumstances and luck. Another wise man had something to say about hard work and luck. Benjamin Franklin noted, "Diligence is the mother of good luck." Let me end with that quote and a wish of good luck to all of you.

Books

Carney, Scott. Harmonic Trading. Vol. 6, Profiting from the Natural Order of the Financial Markets. Upper Saddle River, NJ: FT Press, 2010.

Edwards, Robert D., and John Magee. Technical Analysis of Stock Trends. 9th ed. New York: AMACOM, 2007.

Frost, A. J., and Robert R. Prechter. Elliott Wave Principle: Key to Market Behavior. 10th ed. Wiley Trading Advantage. New York: John Wiley & Sons, 2001.

Murphy, John J. Intermarket Analysis: Profiting from Global Market Relationships. 2nd ed. Wiley Trading. Hoboken, NJ: John Wiley & Sons, 2004.

Nison, Steve. Japanese Candlestick Charting Techniques. 2nd ed. Upper Saddle River, NJ: Prentice Hall Press, 2001.

Olmstead, W. Edward. Options for the Beginner and Beyond; Unlock the Opportunities and Minimize the Risks. 2nd ed. Upper Saddle River, NJ: FT Press, 2012.

Websites

The Options Industry Council: www.optioneducation.org/strategies_advanced_concepts/strategies.html

Market Technicians Association: www.MTA.org

Harmonic Trader: www.harmonictrader.com

My blog and newsletter ideas: www.DragonflyCap.com

Managed Account Information: www.PresidiumCapital.com

To enhance your reading of this book, detailed full-color charts are provided on the companion website. Feel free to download and use these charts.

To access the website, go to www.wiley.com/go/tradingoptions. When prompted for a password, enter “analysis.”

Greg Harmon, CMT, CFA, founded Dragonfly Capital Management, LLC to provide daily technical analysis of securities markets and consulting services to the marketplace. He has traded in the securities markets since 1986, having held senior positions including Head of Global Trading, Head of Product Development, Head of Strategy, and Director of Equity and Portfolio Swaps Trading at Chase Manhattan, State Street Corporation, and BNP Paribas. Greg earned an MBA in finance from New York University's Stern School of Business and a BS in mechanical engineering from Cornell University. He is also a founding partner and CIO of Presidium Capital, LLC, an asset management firm specializing in separate account management.

A

Advance Block pattern
American Association of Individual Investors (AAII) Sentiment Survey
American Capital Agency
American exercise feature
Andrews, Alan
Andrews' Pitchfork
Appel, Gerald
Ascending Triangle pattern
Assignment process
At-the-money (ATM), defined
Average True Range (ATR)

B

Bat Harmonic pattern/Bearish Bat Harmonic pattern
Bearish Butterfly Harmonic pattern
Bearish Engulfing pattern
Bearish Gartley Harmonic pattern
Blue Nile
Bollinger, John
Bollinger bands
  defined
  for sector review analysis
BP
Brent
Broken Wing Butterfly
Bullish Engulfing/Bearish Engulfing reversal patterns
Bullish Shark Harmonic pattern

Butterfly
Buy signal, RSI as
Buy write

C

Calendar spread
Calls
  defined
  naked
  put/call ratio
  See also Options combinations
Carney, Scott M.
Cash-protected (cash-covered) puts
Channels pattern
Charts
  bar charts
  Japanese candlestick charts, defined (See also Japanese candlestick patterns)
  line charts
  reading for trend identification
  reading options tables
Chicago Board Options Exchange (CBOE)
  exercising options and
  Market Volatility Index
China
  China A Shares Index
  Shanghai Composite Index
Classical technical analysis
  horizontal support and resistance
  patterns for
Closing transactions
Commission costs, stock versus options
Consumer Discretionary Select Sector SPDR (XLY)
Consumer Staples Select Sector SPDR (XLP)
Continuation patterns
  Rising and Falling Three Methods
  Three Advancing White Soldiers/Three Black Crows
Contracts

defined
illiquid
jumbo option contracts
mini option contracts
normal option contracts
Copper, trend identification and
Covered call
Crab Harmonic pattern
Crossover, as trend indicator
Crude oil, trend identification and
Cup and Handle pattern

D

Dark Cloud Cover/Piercing Line patterns
Day traders
application of concepts for
moving averages for
position sizing and stop losses
Relative Strength Index (RSI) for
trend identification by
Death Cross
Deep Crab Harmonic pattern
Deepwater Horizon (BP)
Delta concept
Derived and quantitative analysis
Andrews' Pitchfork
Elliott Wave analysis
Fibonacci sequence
Gann angles
generally
Harmonic trading approach
Point and Figure analysis
Wyckoff method
Descending Triangle pattern
Design. See Plan design
Diagonal spread
Diamond pattern
Dividends, stock versus options

Doji indecision pattern
Dow Jones Industrial Average (DJIA), identifying and understanding trends
Dragonfly Doji pattern
Drivers

E

Elliott, Ralph Nelson
Elliott Wave analysis
Elliott Wave Principle (Frost, Prechter)
Emerging market equities
  S&P 500 versus
  trend identification and
Energy Select Sector SPDR (XLE)
European exercise feature
Evening Star pattern
Exchange-traded funds (ETFs), trend identification and
Execution costs, stock versus options
Exercise, defined
Expiry
  defined
  stock versus options
  time value and
Exponential moving averages (EMAs)
  defined
  MACD creation and

F

Falling signal line, as trend indicator
Falling Wedge pattern
Fibonacci sequence
Financials Select Sector SPDR (XLF)
5-0 Harmonic pattern
Flag pattern
Frost, A. J.
Funding options

G

Gann, W. D.
Gann angles
Gartley Harmonic pattern
German DAX Index
Gladwell, Malcolm
Gold
  silver to gold ratio
  trend identification and
Golden Cross
Golden Ratio
Gravestone Doji pattern

H

Hagopian Trigger Line
Hammer/Hanging Man patterns
Hanging Man pattern
Harami indecision pattern
Harmon, Greg
Harmonic trading approach
Head and Shoulders pattern
Healthcare Select Sector SPDR (XLV)
High-yield (“junk”) bonds, U.S. Treasury bonds versus
Histograms
Holders, defined
Horizontal support. See also Patterns

I

Illiquid contracts
Indecision candles (patterns)
  Doji
  Harami
  Spinning Top
Indexes, for trend identification
Indicators
  Bollinger bands
  generally
  moving average convergence/divergence (MACD)
  moving averages

Relative Strength Index (RSI)
Industrials Select Sector SPDR (XLI)
Intermarket relationships, trend identification and
In-the-money (ITM)
defined
out-of-the-money (OTM) versus
Intrinsic value
Inverse Head and Shoulders pattern
Iron Condor

J

Japanese candlestick patterns
Bullish Engulfing/Bearish Engulfing
color used in
Dark Cloud Cover/Piercing Line
Doji
Hammer/Hanging Man
Harami
Japanese candlesticks, defined
price action of stocks illustrated by
“real body” of Japanese candlesticks
Rising and Falling Three Methods
shadows of Japanese candlesticks
Spinning Top
Stars
Three Advancing White Soldiers/Three Black Crows
Jumbo option contracts
“Junk” bonds, U.S. Treasury bonds versus

L

Leonardo da Pisa (Fibonacci)
Levels, setting
Liber Abaci (Fibonacci)
Liquidity
illiquid contracts
position sizing and stop losses

M

Margin
costs
short option combination
Materials Select Sector SPDR (XLB)
Mini option contracts
Momentum
indicators of (See also Moving average convergence/divergence (MACD); Relative Strength Index (RSI))
trend identification and
Morning Star pattern
Mosaic, building
Moving average convergence/divergence (MACD)
creation of
defined
exponential moving averages (EMAs)
momentum strength and
sector review analysis
Moving averages
applications of
exponential moving averages (EMAs)
generally
Golden Cross, Death Cross and
moving average convergence/divergence (MACD)
simple moving average (SMA)

N

NASDAQ-100
identifying and understanding trends
trend identification and
Natural gas
Nested Fibonaccis
News
about individual stocks
about markets
Nison, Steve
Normal (size) option contracts

O

Opening transactions
Options
advantages of
contract size
expiration and exercise
option tables
price terminology
related definitions
stock versus
strategies, generally
trading as process
understanding
See also Derived and quantitative analysis; Indicators; Japanese candlestick patterns; Options combinations; Trading plan; Trend identification; Watch list and initial plan
Options combinations
“cheat sheet” of combinations and descriptions
covered call or buy write
long a put or call
long a put spread or call spread
long a ratio put or call spread
long or short a Butterfly
long or short a Calendar
long or short a Diagonal
long or short an Iron Condor
long or short a Risk Reversal
long or short a Straddle
long or short a Strangle
popular combinations
short a put or call
short a put spread or call spread
Oscillators
Out-of-the-money (OTM)
defined
in-the-money (ITM) versus

P

Patterns

Channels
Cup and Handle
Diamonds
Flags
generally
Head and Shoulders
Rising Wedge
Triangles
See also Derived and quantitative analysis; Japanese candlestick patterns
Piercing Line (Piercing Candle) pattern
Plan design
design and execution (See also Plan execution)
elements of
individual stocks and
position sizing and stop losses
See also Trading plan
Plan execution
adjustments
design and execution
hedging
profit taking
waiting for stock to trigger
See also Trading plan
Point and Figure analysis
Portfolio and trade risk tolerance
Position sizing
Position traders
Fibonacci analysis for
position sizing and stop losses
time frame for
PowerShares QQQ Trust, trend identification and
Prechter, Robert R.
Preparation
importance of
trading as process and
using charts for (See also Trend identification)
Price action
indicators deriving from

trend identification and
See also Japanese candlestick patterns
Puts
cash-protected (cash-covered)
defined
put/call ratio
See also Options combinations

R

Ranking, of sectors
Ratios
Golden Ratio
ratio charts
significant market ratios
Relative strength
RSI versus
for sector review analysis
Relative Strength Index (RSI)
as bull market indicator
defined
RSI positive/negative reversal
sector review analysis
Renko charts
Resistance
Bollinger bands and
defined
moving averages and
Reversal patterns
Bullish Engulfing/Bearish Engulfing
Dark Cloud Cover/Piercing Line
Hammer/Hanging Man
Stars
Rising and Falling Three Methods patterns
Rising signal line, as trend indicator
Rising Wedge pattern
Risk
as advantage to using options
risk limiter

risk management and position sizing
Risk Reversal (options combination)
Russell 2000
identifying and understanding trends
trend identification and

S

Seagull
Sector review analysis
relative strength and
Select Sector SPDR charts for
use of
Select Sector SPDR
Sellers, defined
Sell signal, RSI as
Sentiment indicators
Shadows, of Japanese candlesticks
Shanghai Composite Index
S&P 500 ratio
trend identification and
Shark Harmonic pattern
Shooting Star pattern
Short interest
Silver, gold ratio to
Simple moving average (SMA)
defined
MACD creation and
sector review analysis
sentiment and
“Sold to open”
Spinning Top indecision pattern
Standard & Poor's (S&P)
emerging markets versus
identifying and understanding trends
Shanghai Composite Index to S&P 500 ratio
S&P 500 SPDR
trend identification and
U.S. Treasury bonds versus

See also Trend identification
Stars patterns
Stocks
developing plan for (See also Watch list and initial plan)
identifying and understanding trends
news about individual stocks
options versus
plan execution and waiting for stock to trigger
See also Japanese candlestick patterns
Stop loss
position sizing and
setting
Straddle
Strangle
Strike price
defined
intrinsic value
Support
Bollinger bands and
defined
moving averages and
See also Patterns
Swing traders
Fibonacci analysis for
moving averages for
position sizing and stop losses
Relative Strength Index (RSI) for
time frame used by
trend identification for
Symmetrical Triangle pattern

T

Technical analysis
goal of
understanding
See also Classical technical analysis; Derived and quantitative analysis; Indicators; Watch list and initial plan
Technical indicators. See Indicators

Technical triggers
Theta concept
Three Advancing White Soldiers/Three Black Crows patterns
Three Drives Harmonic pattern
3D Systems
Time frames
  position sizing and stop losses
  for sector review analysis
  for technical analysis goals
  for trend identification
  watch list and
  See also Expiry
Time spreads
Traders, types of. See Day traders; Position traders; Swing traders
Trading Options (Harmon), companion website to
Trading plan
  analysis
  earnings trade plans for
  execution of
  plan design
  top trade ideas for
  trend identification
  See also Watch list and initial plan
Trend identification
  indexes and time frames for
  market influencers and intermarket relationships
  momentum and
  price action and
  ratio charts
  reading charts for
  sentiment indicators
  significant market ratios
  trends, defined
  trend tools
  See also Sector review analysis
Triangle pattern

U

U.S. Dollar Index, trend identification and
U.S. Treasury bonds
  high-yield (“junk”) bonds versus
  S&P 500 versus
  trend identification and
Utilities Select Sector SPDR (XLU)

V

Volatility
  Chicago Board Options Exchange Market Volatility Index
  generally
  indicators of (See also Bollinger bands)

W

Watch list and initial plan
  building a mosaic
  creating trading plan (See also Plan design)
  nontechnical factors for review
West Texas Intermediate Crude (WTIC)
Wilder, J. Welles, Jr.
“W,” of Harmonic patterns
Wyckoff method